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IN THE

Supreme Court of the United States

October Term, 1985

ATLANTIC RICHFIELD COMPANY; ARCO PIPE LINE COMPANY; EXXON CORPORATION; EXXON PIPELINE COMPANY; BP ALASKA, INC.; SOHIO ALASKA PETROLEUM COMPANY; and SOHIO PIPE LINE COMPANY,

Appellants,

vs.

STATE OF ALASKA, *et al.*,

Appellees.

On Appeal From the Supreme Court of Alaska

APPENDIX TO JURISDICTIONAL STATEMENT

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D. AFFIDAVIT OF SIDNEY DAVIDSON, Filed July 30, 1982 ..... 150a

Sidney Davidson is Arthur Young Professor of Accounting at the University of Chicago and former Dean of the Graduate School of Business. His affidavit shows that generally accepted accounting principles provide no support for the Oil Tax Act, and that the effect of the Act is to discriminate against interstate commerce.

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E. AFFIDAVIT OF PETER MIESZKOWSKI, Filed July 30, 1982 ..... 172a

Peter Mieszkowski is Cline Professor of Economics and Finance at Rice University. His affidavit shows that Alaska's tax policies are not constrained by ordinary political and economic considerations, and that Alaska's expenditure levels are consequently disproportionate to those of all other states.

F. AFFIDAVIT OF WILLIAM J. BAUMOL, Filed July 30, 1982 ..... 216a

W. J. Baumol is Professor of Economics at Princeton University and New York University and a former President of the American Economic Association. His affidavit shows that it is unsound, as a matter of both economic theory and practice, to attempt to divide the income of a multistate business on geographic lines in a situation where the business enjoys economies of scale and scope, and that the attempt to do so will result in duplicative taxation and burdens on the conduct of interstate business.

G. AFFIDAVIT OF HORACE BROCK, Filed July 30, 1982 ..... 253a

Horace Brock is Distinguished Professor of Accounting and Director of the Extractive Industries Accounting Research Institute. His affidavit demonstrates that exclusive allocation overattributes income to Alaska and is improper from the point of view of accepted revenue accounting practices for the oil industry.

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H. SUPPLEMENTAL AFFIDAVIT OF HORACE BROCK, Filed November 17, 1982 ..... 277a

In his supplemental affidavit, Mr. Brock demonstrates that the Oil Tax allows no deduction from taxable income for any profits attributable to activities outside Alaska.

I. AFFIDAVIT OF THOMAS W. GILLETTE, Filed July 30, 1982 ..... 291a

Thomas W. Gillette is a Senior Supply Consultant in the Supply Department of Exxon. His affidavit shows the interstate structure of Exxon's oil production and shows that only a *de minimis* amount of the oil Exxon produces in Alaska is sold in Alaska.

J. SOHIO FACT SUMMARY, Filed July 30, 1982 329a

This summarizes affidavits submitted to the Superior Court by Sohio employees, including affidavits which show that Sohio's oil production is interstate in structure, that the great majority of its oil sales are outside of Alaska, and that the Oil Tax allocates to Alaska 100% of Sohio's oil production income and taxes a disproportionate share of its total income.

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K. AFFIDAVIT OF SCOTT K. TOMPKINS, Filed July 30, 1982 ..... 368a

Scott K. Tompkins is a staff tax accountant in the Atlantic Richfield Company Tax Department. His affidavit shows the degree to which the Oil Tax subjected Atlantic Richfield Company to double taxation during all tax years at issue. In addition, it shows that in all such tax years, uniform adoption of Alaska's law would subject well in excess of 100% of the income of Atlantic Richfield Company to tax.

L. AFFIDAVIT OF OSCAR E. JONES, Filed July 30, 1982 ..... 376a

Oscar E. Jones is Supervisor of the Income and Franchise Tax Section of the Tax Compliance Division of Exxon. His affidavit shows the degree to which the Oil Tax subjected Exxon to double taxation during all tax years at issue. In addition, it shows that in all such tax years, uniform adoption of Alaska's law would subject well in excess of 100% of the income of Exxon to tax.

M. AFFIDAVIT OF E. WAYNE TANNER, Filed July 30, 1982 ..... 380a

E. Wayne Tanner is Manager, Tax Legislative Affairs in the Accounting Department of Sohio. His affidavit shows the degree to which the Oil Tax subjected Sohio to double taxation during all tax years at issue. In addition, it shows that in all such tax years, uniform adoption of Alaska's law would subject well in excess of 100% of the income of Sohio to tax.

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R. F. Heidner is the Manager of the Tax Compliance Division of Exxon. His affidavit includes a table which sets forth each state where Exxon filed a tax return and which required Exxon to include in the income base to be apportioned income from production of oil in Alaska.

O. AFFIDAVIT OF GARY L. JENKINS, Filed November 17, 1982 ..... 408a

Gary L. Jenkins was Director of the Division of Audit in the Alaska Department of Revenue from December 1974 until July 1981. His affidavit shows that in the period 1978-81 Alaska consistently interpreted its tax laws as requiring that an oil company with producing wells or pipelines outside Alaska, but not in Alaska, apportion to Alaska a share of the income from such wells or pipelines.

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P. FIRST SUPPLEMENTAL AFFIDAVIT OF ROBERT E. McMANUS AND SUPPORTING EXHIBITS, Filed July 13, 1984 ..... 410a

Robert E. McManus is Senior Tax Counsel of Atlantic Richfield Company. His affidavit and supporting exhibits show that if Alaska Department of Revenue Ruling 82-2, as interpreted by the Department of Revenue, were applied in every state, in those states where a taxpayer is engaged in exploration activities but not in production or pipeline activities, it would be subject to apportionment under AS 43.20, but could not deduct from its apportionable income its exploration losses.

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APPENDIX

A. COPIES OF THE DECISIONS APPEALED FROM

I. Opinion of the Supreme Court of Alaska, dated August 16, 1985, affirming the judgment of the Superior Court.

IN THE SUPREME COURT
OF THE
STATE OF ALASKA

File No. S-52

OPINION

[No. 2965 — August 16, 1985]

ATLANTIC RICHFIELD COMPANY;
ARCO PIPE LINE COMPANY; BP ALASKA, INC.;
EXXON CORPORATION; EXXON PIPELINE COMPANY;
and SOHIO PIPE LINE COMPANY,
Appellants,
v.
STATE OF ALASKA; ALASKA DEPARTMENT OF REVENUE;
ALASKA DEPARTMENT OF ADMINISTRATION;
COMMISSIONER OF REVENUE ROBERT D. HEATH,
and COMMISSIONER OF ADMINISTRATION LISA RUDD,
Appellees.

Appeal from the Superior Court of State of Alaska,
Third Judicial District, Anchorage,
Victor D. Carlson, Judge.

[List of appearances omitted]

Before: BURKE, C.J., RABINOWITZ, MATTHEWS, and MOORE, JJ. [COMPTON, J., not participating]

OPINION

BURKE, Chief Justice.

This is an appeal brought by several major oil producing companies in Alaska[1] challenging the constitutionality of the Oil and Gas Corporate Income Tax, Former AS 43.21 (repealed 1982) ("the Oil Tax").[2] The issue is whether the State of Alaska must, as a matter of constitutional law, use the formula apportionment method to determine the portion of each corporation's worldwide oil production and pipeline transportation income that can be attributed to Alaska. During the tax years 1978 to 1981 the state used separate accounting, instead of formula apportionment, to determine taxable production and pipeline transportation income.

Various actions challenging the constitutionality of the Oil Tax were consolidated on August 27, 1980, in the superior court.[3] Appellants ARCO, Exxon, and Sohio argued below that the Oil Tax violated the commerce, due process, contract, and equal protection clauses of the United States Constitution, as well as the equal protection clause of the Alaska Constitution and the state constitutional and statutory provisions against retroactivity. They sought a refund of taxes paid under the Oil Tax.

On November 12, 1981, the state moved for summary judgment seeking a declaration that the Oil and Gas

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[1]Atlantic Richfield Company and ARCO Fipeline Company (collectively "ARCO"), Exxon Corporation and Exxon Pipeline Company (collectively "Exxon"), and BP Alaska, Inc. and Sohio Pipe Line Company (collectively "Sohio").

[2]AS 43.21 (Ch. 110, § 3, SLA 1978; am. ch. 113, §§ 28-32, SLA 1980; am. ch. 116, §§ 6-11, § 17 SLA 1981) was repealed effective January 1, 1982. Ch. 116, § 19, SLA 1981. For convenience, we refer to the Oil Tax by the former statutory section numbers throughout this opinion. *See* Appendix 1 for the full text of AS 43.21.

[3]Other oil companies were also involved initially in the litigation, but were dismissed upon agreeing to defer their constitutional claims pending resolution of this case.

Corporate Income Tax Act is constitutional. The trial court rejected the oil companies' claims of unconstitutionality and granted the state's motion for summary judgment. We affirm.

I. THE OIL TAX

In 1959, Alaska adopted the three-factor apportionment formula of the Uniform Division of Income for Tax Purposes Act (UDITPA) to determine the share of income of an integrated (unitary) interstate business subject to Alaska income taxation. AS 43.20.130 (repealed 1975).[4] The apportionment formula relies on three indicators of business activity — payroll, property and sales — to compute Alaska's share of taxable income. *Id.* The value of property, payroll and sales in Alaska is compared to the value of property, payroll and sales of the corporation worldwide. The resulting ratio is then multiplied by the corporation's apportionable net income worldwide to arrive at an approximation of Alaska's share of taxable income.

Prior to the enactment of the Oil Tax in 1978, all of the income tax liability of oil companies was determined under the formula apportionment method. Under the Oil Tax, a different methodology, separate accounting,[5] was implemented to calculate the production and pipeline transportation income subject to Alaska taxation. The goal of the separate accounting method was to determine that portion of the value of a barrel of oil attributable to

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[4]In 1970, Alaska adopted the Multistate Tax Compact, enacted as AS 43.19.010. It is basically a restatement of UDITPA with a few minor changes. The three-factor apportionment formula is now described at AS 43.19.010, art. IV, §§ 9-15.

[5]The oil companies dispute whether the methodology of the Oil Tax is in fact "true" separate accounting. *See infra* section II. B.

the oil being produced, i.e., taken from the ground. AS 43.21.020.

The separate accounting of oil production income began with the determination of gross production revenue or "gross income."[6] The Oil Tax defined gross income as the value of the oil at the point of production, i.e., the

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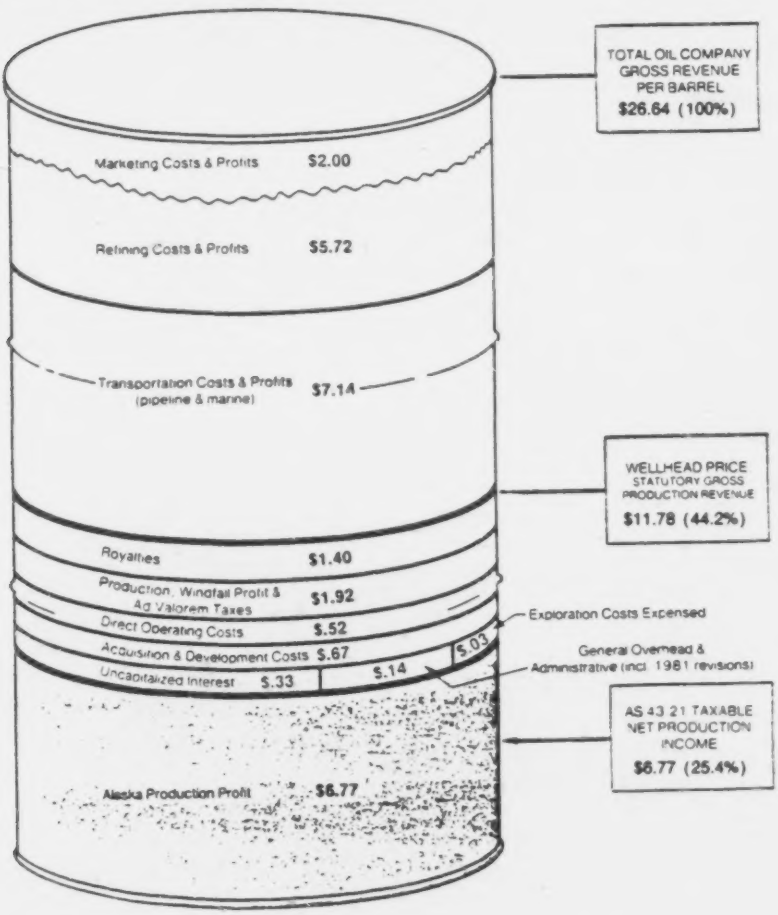
[6]The following graph, submitted by the State of Alaska, illustrates the estimated revenues, costs and profits contained in each barrel of Alaskan oil during the years 1978-80:



SOURCE: Dessin 2d Supplemental Affidavit ¶ 15, R. 16917, 16929.

GNRF 1

wellhead price. AS 43.21.020(b). Essentially, gross income equalled the price at which the oil was sold, or could be sold, to a refinery less transportation expenses. AS 43.21.020(b). The price at which oil was sold, or could be sold, to a refinery obviously did not include refining and marketing costs and profits. These costs and profits were thus excluded in determining the gross income figure for Alaskan oil. In addition, a number of other costs were deducted from gross income. "Upstream" costs, such as exploration expenses, royalties, lease acquisition and development costs, and general overhead and administrative expenses, and "downstream" costs, such as transportation and marketing costs were deducted from gross income. AS 43.21.020(c). The end result was net production income, which was taxed at the 9.4% rate applicable to all other corporate income at that time. Former AS 43.20.011 (amended, repealed and reenacted 1981).

The Oil Tax used a similar methodology to tax income from the pipeline transportation of oil and gas in Alaska. The items of income and expense related to Alaska pipeline transportation were keyed to the amount reported by the oil companies to the Federal Energy Regulatory Commission as net operating income. AS 43.21.030. The validity of this portion of the Oil Tax is also at issue in this case, though the parties focus primarily on the taxation of production income.

Under AS 43.21.040, all other income of the oil companies continued to be taxed under the UDITPA formula apportionment method. Such other income was primarily from marketing and refining operations. In computing this income, worldwide oil production and pipeline transportation income was subtracted from the total amount of income subject to apportionment by Alaska. Then the three-factor formula was applied, again with the produc-

tion and pipeline income in Alaska deleted. The result attributed to Alaska a portion of worldwide refining and marketing income of the oil company approximating the share of such activities occurring in Alaska. This income, like the production and pipeline income, was taxed at the rate of 9.4%. Former AS 43.20.011 (amended, repealed and reenacted 1981).

The Oil Tax was repealed effective January 1, 1982. Ch. 116, § 19, SLA 1981. It was replaced with a modified apportionment formula for the ensuing tax years. AS 43.20.072. The legislature took this step primarily to avoid a further increase in the possible $1.8 billion liability caused by this litigation.

II. THE OIL TAX IS "TRUE" SEPARATE ACCOUNTING

There are three basic methods by which the income of a multistate enterprise can be divided among the states entitled to tax the enterprise's income: separate accounting, specific allocation by situs and formula apportionment. The state claims the Oil Tax is true separate accounting, while the oil companies contend it is specific allocation by situs.

A. *The Three Methods For Division of Income*

1. *Separate Accounting*

Separate accounting attempts to carve out of the taxpayer's overall business the income derived from sources within a single state, and by accounting analysis, to determine the profits attributable to that portion of the business.[7] Income within the state is determined without

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[7] *See generally* J. Hellerstein, State Taxation: Corporate Income and Franchise Taxes ¶ 8.3, at 323-327 (1983).

reference to the success or failure of the taxpayer's activities in other states.[8] In the case of goods (such as crude oil) sent to another state for processing, separate accounting values these goods at the price which could be obtained for them in their unprocessed form when leaving their state of origin.[9] In other words, separate accounting recognizes that crude oil has a marketable value before it is refined.

2. *Specific Allocation by Situs*

Specific allocation by situs refers to the method of dividing a tax measure (in whole or in part) by tracing particular property, receipts, or income to their source state, and attributing the item *in its entirety* to that state.[10] This method is troublesome because more than one state is likely to have a legitimate basis for taxing the same item, especially when the tax is one measured by income.[11] The specific allocation method has been used commonly with "non-business" income such as income from dividends, patent and copyright royalties, and gains or losses from the sale of capital assets.[12] Under UDITPA, some non-business income of this nature is allocated in its entirety to the situs state. *See* AS 43.19.010, art. IV, §§ 5-8.

Confusion may arise because the separate accounting methodology is very similar to the specific allocation

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[8]P. Hartman, Federal Limitations on State and Local Taxation § 9.17, at 522 (1981).

[9]G. Altman & F. Keesling, Allocation of Income in State Taxation 38 (2d ed. 1950).

[10]J. Hellerstein, *supra* note 7, ¶ 8.4, at 328.

[11]*Id.*

[12]*Id.* at 329.

approach. Both methods attempt to trace income to an identifiable source. The primary difference in the two methods is that separate accounting looks to the activities in the state and seeks to determine the income related to that activity. Specific allocation attributes income according to situs, or some other specific characteristic of the business enterprise, rather than on the basis of where the income itself was earned. Moreover, specific allocation results in *all* of a specified type of income and *all* associated profits being allocated to one state. Separate accounting, on the other hand, attempts to segregate out *only* those profits attributable to activities within the state for taxation by that state.

3. *Formula Apportionment*

Formula apportionment is the method commonly used to divide the income of a unitary business[13] among various jurisdictions in which the business operates. The formula method, "unlike separate accounting, does not purport to identify the precise geographical source of a corporation's profits; rather, it is employed as a rough approximation of a corporation's income that is reasonably related to the activities conducted within the taxing State."[14] The formula method assumes that the total income of a business enterprise results from certain income producing factors — typically property, payroll and sales. The value of the corporation's property, payroll and sales within the taxing state is compared with the value of these factors

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[13]"[A] unitary business may be defined simply as any business which is carried on partly within and partly [outside] the taxing jurisdiction." Keesling & Warren, *The Unitary Concept In the Allocation of Income*, 12 Hastings L.J. 42, 46 (1960).

[14]Moorman Mfg. v. Bair, 437 U.S. 267, 273, 57 L. Ed. 2d 197, 204 (1978).

outside the taxing state. The resulting ratio is then multiplied by the total apportionable net income worldwide of the multi-state corporation.[15]

B. *The Oil Tax Is Separate Accounting*

The oil companies equate the Oil Tax with the specific allocation by situs method. They contend that the Oil Tax attributes *all* of the income and profits from oil production and transportation to Alaska. Their argument ignores the difference between the Oil Tax and the specific allocation method. The Oil Tax does not attribute income from the production of oil *in its entirety* to Alaska, the source state. Instead, it attempts to tax only that portion of income from the oil which is fairly related to Alaskan production activities. While total revenue for a barrel of oil during 1978-80 was approximately $26.64, only $6.77 was deemed production income attributable to Alaskan activities and subject to the Oil Tax.[16] In segregating from total income a portion related only to activities in the state, the Oil Tax operates as a separate accounting system.

The companies argue that the Oil Tax is not true separate accounting because it fails to take into account the profit-producing nature of activities occurring outside Alaska. For example, the geological and geophysical anal-

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[15]P. Hartman, *supra* note 8, § 9.18, at 523-524.

[16]The wellhead price did not include refining and marketing costs and profits. The following deductions were also taken from the wellhead price: royalties, native corporation revenue sharing, production, *ad valorem* and windfall profit taxes, direct operating expenses, exploration, acquisition, and development costs, uncapitalized interest and general overhead and administrative expenses inside and outside Alaska (including a reasonable profit). AS 43.21.020(c); 15 AAC 21.200 (Eff. 2/22/79). *See* graph *supra* note 6.

ysis of the Prudhoe Bay area was conducted primarily outside Alaska. The companies argue that only the expenses associated with these outside activities are deductible in computing income subject to the Oil Tax. Thus, in their view, the Oil Tax taxes profits earned outside Alaska.

The state contends that oil companies can deduct profits attributable to general overhead or administrative activities outside of Alaska. Under Department of Revenue regulations, profits associated with such activities could be deducted if the taxpayer in fact considered them profit generally and reported them as such to the stockholders. 15 AAC 21.290(b) (Eff. 2/22/79, am. 3/26/82). The oil companies claim that the Security Exchange Commission prohibits the allocation of profits in this manner, citing 15 U.S.C. § 78m(b)(2)(B)(ii) (1982). This section provides that every issuer of a security subject to the provision must have an internal accounting system that permits preparation of financial statements "in conformity with generally accepted accounting principles or any other criteria applicable to such statements." The parties' experts disagree on the acceptability, under general accounting principles, of allocating profits to general overhead and administrative activities. Even if we assume that the allocation of profits to these activities is not generally accepted, 15 U.S.C. § 78m(b)(2)(B)(ii) allows the use of "other criteria" in financial statements. If, as the oil companies claim, profits exist that are actually attributable to general overhead and administrative activities outside of Alaska, the Securities Exchange Act does not prevent them from reporting such profits to their shareholders, and then deducting them from their Alaska income tax.

Although amended after the repeal of the Oil Tax in 1982, 15 AAC 21.290(b) (Eff. 2/22/79, am. 3/26/82) operates retroactively.[17] The oil companies, therefore, may amend their tax reports and returns to deduct any outside-generated profits attributable to general overhead and administrative activities associated with Alaskan oil production not previously deducted in computing Alaskan taxable income.

The companies also assert that the Oil Tax is an inappropriate methodology because it presumes that

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[17]The only logical interpretation of the 1982 amendment to 15 AAC 21.290(b) is that it operates retroactively for the tax years 1978-81. It cannot be meaningfully applied prospectively because it was adopted *after* the Oil Tax was no longer in effect. We must assume that the process of amending 15 AAC 21.290(b) was intended to be operative. We cannot imagine that the Department of Revenue ("Department") would engage in a futile act. *See* 2A C. Sands, Sutherland Statutory Construction § 45.12, at 54 (4th ed. 1984).

The retroactivity of the Department's regulations is governed by the Alaska Administrative Procedure Act, AS 44.62.240. Under this statute, an "interpretative regulation," such as 15 AAC 21.290(b), may be retroactive only if the agency "has adopted no earlier inconsistent regulation and has followed no earlier course of conduct inconsistent with the regulation." The Department's earlier omission of a deduction for outside-generated profits attributable to general overhead and administration associated with Alaskan oil production could be construed as inconsistent conduct with the 1982 amendment to 15 AAC 21.290(b). AS 44.62.240, however, is concerned with the issues of fairness and notice. *See, e.g.*, AS 43.21.050(d) (authorizing Department to fashion an equitable tax if relief from an unfair allocation is required). In this case, a retroactive interpretation of the 1982 amendment confers a benefit on the oil companies by allowing an additional tax deduction not previously available. Unlike many retroactive enactments, 15 AAC 21.290(b), as amended, does not create a harsh or unfair result for the affected parties. Therefore, the 1982 amendment to 15 AAC 21.290(b) operates retroactively for the tax years 1978-81.

crude oil has a value, i.e., that income has been generated when the oil is merely brought out of the ground. The oil companies argue that oil has no value whatsoever until it is sold.

The oil companies cite our decision in *Sjong v. State, Department of Revenue,* 622 P.2d 967 (Alaska 1981), *appeal dismissed,* 454 U.S. 1131, 71 L. Ed. 2d 284 (1982), for the proposition that the oil has no value until it is sold. We find their reliance misplaced. In *Sjong,* we upheld an apportioned net income tax assessed against a nonresident crab fisherman, who fished exclusively in the international waters surrounding Alaska and sold his catch only to Alaska processors and canneries. Sjong claimed that no taxable income could be attributed to the state because he caught the crabs in international waters. We responded that "the process of fishing results in no profits until the catch is sold to processors in Alaska." 622 P.2d at 972 (footnote omitted). Obviously, profits do not result from crab fishing or oil production until the product is sold. This does not negate the fact that profits generated by the sale are partly attributable to the inherent value of the crab or oil at its point of production.

In the state's view, the extraction of a natural resource, in and of itself, generates income. Thus, it argues that it is reasonable to attribute the income identified with the extraction of oil, measured in terms of "well-head value," to the state in which the oil was extracted. The state is joined in this position by Amicus Curiae, the states of Louisiana, Mississippi and Oklahoma, all which have long employed separate accounting to tax oil production income.[18]

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[18]*See also* Texas Co. v. Cooper, 107 So. 2d 676, 687-91 (La. 1958) (rejected argument that production of oil, in absence of sale, does not result in taxable income); Magnolia Petroleum v. Oklahoma Tax

The United States Supreme Court has likewise recognized the inherent value generated by the extraction of natural resources. In upholding the constitutionality of Montana's severance tax on coal mined in the state, the Court reasoned that "[t]he entire value of the coal, before transportation, originates in . . . [Montana], and mining of the coal depletes the resource base and wealth of the State, thereby diminishing a future source of taxes and economic activity." *Commonwealth Edison v. Montana*, 453 U.S. 609, 624, 69 L. Ed. 2d 884, 898 (1981) (footnote omitted). Before it is transported for sale, oil, like coal, has inherent value, to which profits and income can properly be attributed.[19]

We hold that the Oil Tax is fundamentally a separate accounting method for dividing income, distinct from both the specific allocation by situs and formula apportionment methods.

Comm'n, 121 P.2d 1008, 1013 (Okla. 1941) ("[O]il produced in the state had an easily ascertainable market price that would represent the value of the product attributable wholly to Oklahoma.").

[19]While party to a tax suit in South Carolina, Exxon recognized the existence of oil's wellhead value. In its brief, Exxon asserted that "E&P [exploration and production] income is fully earned at the wellhead, and . . . [is] functionally independent of . . . refining and marketing operations." Appellant's Opening Brief at 19, Exxon v. South Carolina Tax Comm'n, 258 S.E.2d 93 (S.C. 1979), *appeal dismissed*, 447 U.S. 917, 65 L. Ed. 2d 1109 (1980). Exxon went on to note that their witness

> testified that the posted field price was also accepted by the accounting profession as a reliable, independent measure of the value of crude oil at the wellhead. Using this value, . . . the net income earned by exploration and production could be and is accurately measured. This is in accordance with generally accepted accounting principles, because crude oil has a known, realizable value.

Id. at 26.

C. *Separate Accounting More Accurately Attributes Income Generated from Alaskan Oil Than Does Formula Apportionment*

The use of separate accounting to apportion the income of a unitary business, such as each of the companies in this litigation, has been roundly criticized.[20] The United States Supreme Court has noted:

> The problem with this method is that formal accounting is subject to manipulation and imprecision, and often ignores or captures inadequately the many subtle and largely unquantifiable transfers of value that take place among the components of a single enterprise.

Container Corp. of America v. Franchise Tax Board, 463 U.S. 159, 164-65, 77 L. Ed. 2d 545, 553 (1983) (citation omitted). For instance,

> while it [separate accounting] purports to isolate portions of income received in various States, [it] may fail to account for contributions to income resulting from functional integration, centralization of management, and economies of scale. Because these factors of profitability arise from the operation of the business as a whole, it becomes misleading to characterize the income of the business as having a single identifiable "source." Although separate geographical accounting may be useful for internal auditing,

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[20] *See, e.g.*, G. Altman & F. Keesling, *supra* note 9, at 38 ("It is obvious, however, that a separate accounting, no matter how detailed, is basically false if the business done in more than one state is of a unitary character, . . . "); Dexter, *The Unitary Concept in State Income Taxation of Multistate-Multinational Businesses*, 10 Urb. Lawyer 181, 207 (1978) ("[T]he use of separate accounting to attribute unitary income to a taxing jurisdiction is conceptually inconsistent.").

> *for purposes of state taxation it is not constitutionally required.*

Mobil Oil v. Commissioner of Taxes, 445 U.S. 425, 438, 63 L. Ed. 2d 510, 521 (1980) (emphasis added; citations omitted).

These criticisms, however, are inapplicable to the oil and gas industry. The standard three-factor formula apportionment method was "developed and designed to meet the needs of manufacturing and mercantile industries, and [is] poorly adapted to a good many other businesses."[21] The United States Supreme Court has noted that the three-factor formula is "necessarily imperfect":

> First, the one-third-each weight given to the three factors is essentially arbitrary. Second, *payroll, property, and sales still do not exhaust the entire set of factors arguably relevant to the production of income.*

Container Corp. of America v. Franchise Tax Board, 463 U.S. at 183 n.20, 77 L. Ed. 2d at 565 n.20 (emphasis added). An assumption made in the use of formula apportionment is that "*major* income-producing elements can be identified and that these major elements contribute the largest portion of the unitary income of the taxpayer."[22]

A unique characteristic of unitary oil and gas businesses is that the major income-producing element is the value of the oil and gas reserves in the ground. While this

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[21]J. Hellerstein, *supra* note 7, ¶ 10.9, at 689.

[22]A. Cohen, Apportionment and Allocation Formulae and Factors Used by States in Levying Taxes Based on or Measured by Net income of Manufacturing, Distributive and Extractive Corporations 14 (1954). [Record 1561]

element can be readily identified, it is not recognized under traditional formula apportionment methods.[23] Instead, the typical factors used are property, payroll and sales, none of which accurately reflects the oil and gas corporations' activities in Alaska. The property factor includes only the original cost of the wells and the lease, which do not necessarily represent the value of the oil reserves themselves. *See* AS 43.19.010, art. IV, § 11. As a result, the Prudhoe Bay field is valued at about one percent of its actual worth.[24] Under UDITPA, the payroll factor includes only wages paid to employees based in the state. AS 43.19.010, art. IV, §§ 13-14. Oil production, however, is not a labor-intensive industry. Moreover, much of the production work is done by employees based in other states, or by independent contractors, whose earnings do not appear in the payroll factor. Finally, and most importantly, the sales receipts under UDITPA are credited solely to the destination state. AS 43.19.010, art. IV, § 16. The oil companies and the state agree that only a "tiny fraction" of the oil produced in Alaska is actually sold within the state.

For all of the above reasons, separate accounting, not formula apportionment, is the prevailing method throughout the United States for reporting income from oil production.[25] The Comptroller General's report explains

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[23] *Id.*

[24] *See* B. Sorensen, Memorandum to the Honorable Nels A. Anderson, Jr. (May 27, 1976) (discussing state corporate income tax).

[25] Rudolph, *State Taxation of Interstate Business: The Unitary Business Concept and Affiliated Groups*, 25 Tax L. Rev. 171, 191 (1970). Of the top five producing states, three — Alaska, Louisiana and Oklahoma — require the use of separate accounting to determine income attributable to oil production. Texas imposes no corporate income tax, and California requires formula apportionment. Statisti-

that states use separate accounting to determine the income division for unitary oil and gas businesses "because it conforms more to [the businesses'] financial accounting procedures and . . . more accurately reflects income than formula apportionment."[26]

Alaska has not employed separate accounting to divide the income of all unitary businesses. According to the state, the Alaska legislature turned to separate accounting for oil producing businesses only after it determined that the use of formula apportionment to compute Alaska's share of oil production income would seriously underestimate the production income that was rightly subject to taxation by this state.[27]

The oil companies cite portions of legislative history to show that the Oil Tax was imposed in an effort to unilaterally effect a renegotiation of oil leases so as to shift the cost of Alaska's government to the oil industry. The legislature, however, formally declared that the income tax of corporations engaged in oil production or pipeline transportation would be computed under the Oil Tax because the formula apportionment method did not fairly represent the extent of those corporations' oil production and transportation activities in Alaska. Ch. 110, § 1, SLA

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cal Abstract of the United States at 730 (1983). *But see* Cal. Rev. & Tax Code Ann. § 25137 (West 1979) (allowing separate accounting, or other alternative methods of apportionment, when total formula apportionment does "not fairly represent the extent of the taxpayer's business activity in this state.").

[26]GAO Report to the Chairman, House Committee on Ways and Means: Key Issues Affecting State Taxation of Multijurisdictional Corporate Income Need Resolving 3 (1982). [Record 17,023].

[27]The Oil Tax was enacted only after it was considered by two legislatures over a four year period. Sixty-three hearings were held and dozens of studies and reports were made.

1978. To look beyond this articulated basis would lead to a "parade of legislators' affidavits containing their perceptions" of the Oil Tax's purpose. *Alaska Public Employees Association v. State*, 525 P.2d 12, 16 (Alaska 1984). We have recently disapproved of such inquiries. *Id.* The United States Supreme Court has also declined to search for the "real" motive beyond the legislature's expressed purposes when adjudicating equal protection and commerce clause challenges. In *Minnesota v. Clover Leaf Creamery*, 449 U.S. 456, 66 L. Ed. 2d 659 (1981) the Court stated that it would

> assume that the objectives articulated by the legislature are actual purposes of the statute, unless an examination of the circumstances forces us to conclude that they "could not have been a goal of the legislation."

449 U.S. at 463 n.7, 66 L. Ed. 2d at 668 n.7 (quoting *Weinberger v. Wisenfeld*, 420 U.S. 636, 648 n.16, 43 L. Ed. 2d 514, 525 n.16 (1975)). Nothing in the record leads us to conclude that accurate and fair allocation could not have been the legislature's goal in enacting the Oil Tax.[28]

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[28] *See, e.g.*, Minutes of Senate Finance Committee (May 21, 1977): "[T]he income tax is not designed to pick up additional money but to try to establish equal treatment between companies operating within the state." (Statement of Senator Chancy Croft) [Record 4759]; Minutes of Senate Resource Committee (February 22, 1978): "If we're seeking to raise money — I think the most effective way is through a severance tax." (Statement of Commissioner Sterling Gallagher [Record 1704]); Office Memo to Senator Rader from Kay Brown (December 22, 1977): "[S]eparate accounting [is the] most equitable method because under it every corp[oration] pays [the] same effective tax rate." (Statement of Senator Chancy Croft) [Record 1661]; Testimony Before House/Senate Resources Committees (January 25, 1978): "[T]he purpose [of separate accounting] is not to get higher taxation, but it gives you a direct fix on what the

The fact that the traditional formula apportionment method inaccurately reflects the oil companies' income and profits derived from Alaskan production activities is illustrated in the case of Sohio. The oil companies maintain that during 1978-80, when the Oil Tax was in effect, an average of only 10% of Sohio's payroll, 12% of its sales and 50% of its property were in Alaska. At the same time, Sohio indicated in its 1980 annual report that over 90% of its total oil production derived from the reserves in Alaska. [Record 1559] A media report offered by the state, with which the oil companies did not take issue, indicated that Alaskan oil had elevated Sohio from seventeenth to seventh in earnings in the oil industry:

> Once severely short of crude, Sohio's bonanza from its huge reserves of Alaskan oil skyrocketed 1979 profits to $1.2 billion, a phenomenal 2,200% blast in just one decade.[29]

Clearly the traditional formula apportionment method would inadequately reflect the phenomenal value of the companies' oil reserves in Alaska.

III. SUMMARY JUDGMENT WAS PROPER

The oil companies argue that there are numerous disputed issues of fact which preclude summary judgment for the state. Several of the alleged disputed issues of fact are irrelevant to the constitutional challenge and do not

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profitability of the industry's operations are." (Statement of consultant Milton Lipton) [Record 1941]

[29] *Investing a Mountain of Cash Before the Oil Runs Out: An Oil Giant's Dilemma*, Bus. Wk. 60 (August 25, 1980). [Record 684]

preclude summary judgment.[30] Other claims by the oil companies reduce to the assertion that the characterization of the Oil Tax as a separate accounting methodology is a disputed issue of fact. The state argues that the question as to whether the Oil Tax is a form of separate accounting is a question of law. We agree with the state that a trial is not required in this case. The characterization of the Oil Tax is at most a "legislative fact" which is not the type of factual issue for which trial is necessary. *See State v. Erickson*, 574 P.2d 1, 4-6 (Alaska 1978). As the trial court held, "the asserted issues of material fact do not preclude summary judgment in any event because they are facts only in the sense that they provide premises in the process of legal reasoning. They are not that type of fact for which a trial is mandated."

Finally, the oil companies claim that it is a disputed issue of fact whether the Oil Tax results in double taxation because it reaches income earned outside Alaska. An income attribution method, be it single-factor or three-factor formula apportionment or separate accounting, is not constitutionally invalid merely because it may result in taxation of some income that did not have its source in the state. *See Moorman Manufacturing v. Bair*, 437 U.S. 267, 272, 57 L. Ed. 2d 197, 204 (1978). Even if facts demonstrate that the Oil Tax reaches income earned outside Alaska, as alleged by the oil companies, the statute will be stricken only upon "clear and cogent evidence" that the income Alaska attributes to itself is "out of all appropriate proportions to the business transacted in [the] State," or has "led to a grossly distorted result." *Container Corp. of America v. Franchise Tax*

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[30]For example, whether the oil companies had, themselves, measured their income by methods similar to those used by the Oil Tax is irrelevant.

Board, 463 U.S. at 170, 77 L. Ed. 2d at 556 (citations omitted). Nothing in the record demonstrates that the Oil Tax led to a "grossly distorted result" or that it is "out of all appropriate proportions" to the business of extracting billions of barrels of oil from reserves located within Alaska.

Disposition by summary judgment was appropriate in this case because no issue of material fact remained. The record provided the trial judge with a sufficient background to reach a decision.[31] *See Kelly v. Zamarello,* 486 P.2d 906, 914 (Alaska 1971); *cf. Ault v. Alaska State Mortgage Association,* 387 P.2d 698, 701-02 (Alaska 1963).

IV. CONSTITUTIONAL CHALLENGES TO THE OIL TAX

A. *Background*

When state corporate income taxes were first adopted,[32] separate accounting was regarded as the most precise method for dividing the income of a multistate corporation for taxation purposes.[33] Although apportionment formulas were employed by states and their use

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[31]An extensive record was developed, which is divisible into three categories. First, the bulk of the record consists of the legislative history of the Oil Tax. Second, competing affidavits from various economists and accountants present divergent economic theories on how oil production income is generated, and how, as a matter of policy, it should be divided among the states for taxation purposes. Finally, a large number of affidavits submitted by the companies describe the various activities associated with oil production which occur outside Alaska.

[32]Wisconsin adopted the first corporate income tax in 1911. J. Hellerstein, *supra* note 7, ¶ 1.2, at 5.

[33]*Id.* ¶ 8.3, at 324.

approved by the United States Supreme Court,[34] separate accounting was initially viewed as a benchmark by which to judge the reasonableness of state apportionment formulas. Thus, in *Hans Rees' Sons, Inc. v. North Carolina*, 283 U.S. 123, 128, 75 L. Ed. 879, 905 (1931), the Supreme Court invalidated a state's apportionment formula under federal due process because the taxpayer showed that under separate accounting only 17% of the income was attributable to the state, whereas under the apportionment formula used, the state taxed from 66% to 85% of the corporation's income.

The use of separate accounting as a basis for challenging state formula apportionment methods was eventually rejected in *Butler Brothers v. McColgan*, 315 U.S. 501, 86 L. Ed. 991 (1942). There, the Court acknowledged that an apportionment formula could be invalidated only if the taxpayer established by clear and cogent evidence that the formula taxed extraterritorial values. The Court held that the fact that no net income would be attributable to the state under separate accounting was insufficient to invalidate an apportionment formula.

> It is true that appellant's separate accounting system for its San Francisco branch attributed no net income to California. But . . . [that] does not prove appellant's assertion that extraterritorial values are being taxed.

315 U.S. at 507, 86 L. Ed. at 996.

The Court developed the doctrine that if a multi-state business is unitary, then the use of a formula apportion-

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[34]Underwood Typewriter v. Chamberlain, 254 U.S. 113, 65 L. Ed. 165 (1920).

ment method by the state is presumptively valid.[35] In the instant litigation, all of the companies involved are unitary businesses. Thus, it is undisputed that the use of an apportionment formula would have been a permissible means of atrributing a portion of the companies' income to Alaska.

This case presents an interesting twist on previous constitutional challenges to state taxation methods by corporate taxpayers.

> In the past, apportionability often has been challenged by the contention that income earned in one State may not be taxed in another if the source of the income may be ascertained by separate geographical accounting.

Mobil Oil v. Commissioner of Taxes, 445 U.S. at 438, 63 L. Ed. 2d at 521. Conversely, in this litigation, the oil companies seek to defeat Alaska's separate accounting method by arguing that formula apportionment is *required* for unitary businesses. In recent years, the Court's endorsement of formula apportionment as the preferred method to divide income of a unitary business has become increasingly apparent.[36] However, we do not interpret this preference as being a constitutional ruling that formula apportionment *must* be employed in lieu of separate accounting.

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[35] *See* J. Hellerstein, *supra* note 7, ¶ 8.7, at 338-343.

[36] *See, e.g.*, Exxon v. Wisconsin Dep't of Revenue, 447 U.S. 207, 229-30, 65 L. Ed. 2d 66, 85 (1980); Mobil Oil v. Commissioner of Taxes, 445 U.S. 425, 446, 63 L. Ed. 2d 510, 526 (1980).

While separate accounting is not constitutionally required,[37] and while it may have some weaknesses when applied to some unitary businesses,[38] this methodology has not been rejected as unconstitutional. The United States Supreme Court in *Container Corp.* concluded that:

> Both geographical accounting and formula apportionment are imperfect proxies for an ideal which is not only difficult to achieve in practice, but difficult to describe in theory . . . .
>
> . . . .
>
> But we see no evidence demonstrating that the margin of error (systematic or not) inherent in the three-factor formula is greater than the margin of error (systematic or not) inherent in . . . separate accounting . . . .

463 U.S. at 182, 183-84, 77 L. Ed. 2d at 564, 565.

B. *Due Process*

The oil companies claim that the Oil Tax is unconstitutional because it taxes extraterritorial values. They claim that the state impermissibly taxes all of their production income from Alaska oil, despite the contributions that other states have made to those earnings in terms of research, management and sales.

"As a general principle, a state may not tax value earned outside its borders." *Earth Resources v. State, Department of Revenue,* 665 P.2d 960, 966 (Alaska 1983) (quoting *ASARCO v. Idaho State Tax Commission,* 458

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[37] *See Mobil,* 445 U.S. at 438, 63 L. Ed. 2d at 521; Exxon v. Wisconsin Dep't of Revenue, 447 U.S. at 223, 65 L. Ed. 2d at 81.

[38] *See Mobil,* 445 U.S. at 438, 63 L. Ed. 2d at 521; Earth Resources v. State, Dep't of Revenue, 665 P.2d 960, 966 (Alaska 1983).

U.S. 307, 315, 73 L. Ed. 2d 787, 794 (1982)); *Container Corp. of America v. Franchise Tax Board,* 463 U.S. at 164, 77 L. Ed. 2d at 552. Any attempt to tax extraterritorial values would be an unconstitutional taking of property under the due process clause.[39] Due process imposes two requirements before a state may tax income generated in interstate commerce. First, a "minimal connection" must exist between the interstate activities and the taxing state. Second, the income attributed to the taxing state must bear a rational relationship to intrastate values of the enterprise. *Exxon v. Wisconsin Department of Revenue,* 447 U.S. 207, 219-220, 65 L. Ed. 2d 66, 79 (1980); *Mobil Oil v. Commissioner of Taxes,* 445 U.S. at 436-37, 63 L. Ed. 2d at 520; *Moorman Manufacturing v. Bair,* 437 U.S. at 272-73, 57 L. Ed. 2d at 204.

The first requirement — a minimal connection — is established if the corporation "avails itself of the 'substantial privilege of carrying on business' within the State." *Exxon v. Wisconsin Department of Revenue,* 447 U.S. at 220, 65 L. Ed. 2d at 79 (quoting *Mobil,* 445 U.S. at 437, 63 L. Ed. 2d at 520, quoting *Wisconsin v. J.C. Penney Co.,* 311 U.S. 435, 444-45, 85 L. Ed. 267, 271 (1940)). Clearly, a nexus exists between the oil production and transportation activities of ARCO, Exxon, and Sohio, and the State of Alaska.

As to the second requirement, the United States Supreme Court has not required absolute precision in determining a state's share of interstate income. In *Moorman*

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[39]The due process clause of the fourteenth amendment provides in part:

> [N]or shall any State deprive any person of life, liberty, or property, without due process of law; nor deny to any person within its jurisdiction the equal protection of the laws.

U.S. Const. amend. XIV, § 1.

Manufacturing v. Bair, 437 U.S. 267, 57 L. Ed. 2d 197, an animal feed company which manufactured its product in Illinois and sold it in Iowa challenged the constitutionality of Iowa's statutory apportionment formula. Instead of the typical three-factor (payroll, property and sales) formula, Iowa used a single-factor formula based exclusively on sales. The corporation argued that this formula resulted in extraterritorial taxation and violated the due process and commerce clauses of the federal Constitution. In addressing the rational relationship requirement, the Supreme Court stated:

> States have wide latitude in the selection of apportionment formulas and . . . a formula-produced assessment will only be disturbed when the taxpayer has proved by "clear and cogent evidence" that the income attributed to the State is in fact "out of all appropriate proportion to the business transacted . . . in that State," or has "led to a grossly distorted result."

437 U.S. at 274, 57 L. Ed. 2d at 205 (citations omitted). The Court found the taxpayer had failed to demonstrate any arbitrary result in its case, and thus the tax survived the due process challenge.

More recently the United States Supreme Court has expressly refused to constitutionally require a particular income attribution method to the exclusion of all others. In *Container Corp. of America v. Franchise Tax Board*, 463 U.S. 159, 77 L. Ed. 2d 545, the Supreme Court upheld California's inclusion of the income of Container Corporations' foreign subsidiaries in the state's apportionment formula. The corporation argued that inclusion of this income violated both the due process and commerce clauses, because the same income California was subjecting to apportionment was taxed by foreign jurisdictions

under a separate accounting methodology. In rejecting this argument, the Court noted:

> In the case of a more-or-less integrated business enterprise operating in more than one State, . . . arriving at precise territorial allocations of "value" is often an elusive goal, both in theory and in practice. For this reason and others, *we have long held that the Constitution imposes no single formula on the States,* and that the taxpayer has the "distinct burden of showing by 'clear and cogent evidence' that [the state tax] results in extraterritorial values being taxed . . . ."
>
> *One way of deriving locally taxable income is on the basis of formal geographical or transactional accounting [separate accounting].*

463 U.S. at 164, 77 L. Ed. 2d at 552-53 (citations omitted, emphasis added).

We hold that the Oil Tax satisfies the second requirement of the due process clause. It makes a reasonable attempt to attribute only that income to Alaska that was generated in Alaska, while excluding expenses and profits generated beyond Alaska's borders. Under a separate accounting approach, income is viewed as earned when and where the principal operating activity occurs. Support activities are universally accounted for only as expenses, whether they occur in or outside the income-producing state. As with other states' separate accounting methods, the Oil Tax allows for the deduction of costs and profits from marketing, refining and transportation, and expenses related to other support activities.[40] Moreover, Alaska's tax is unique in allowing a deduction for out-of-

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[40] *See* La. Income Tax Reg. art. 47:244.A (1985); Miss. Code Ann. § 27-7-23(b)(3) (1983); Okla. Stat. Ann. tit. 68, §2358, A.4.a,b,c

state profits as well as costs of general overhead and administrative activities incident to Alaskan oil production and transportation, if the companies report them as such. *See* 15 AAC 21.290(b) (Eff. 2/22/79, am. 3/26/82). By allowing all of these deductions, the Oil Tax is intended to tax only those profits associated with the companies' activities within the state. Thus, the Oil Tax taxes only a portion of the companies' income, although by a technique quite different from formula apportionment.[41] Because the Oil Tax operates to tax only a portion of the companies' income, we hold that it satisfies the dual requirements of due process.

C. *Commerce Clause*

We have previously recognized that the commerce clause[42] "places restraints upon the taxing power of states similar to those of the due process clause. In fact, these two constitutional limits overlap to a great extent." *Sjong v. State, Department of Revenue*, 622 P.2d at 973. Generally, if a state tax "is applied to an activity with a substantial nexus with the taxing State, is fairly apportioned, does not discriminate against interstate commerce and is fairly related to the services provided by the State," there is no impermissible burden on interstate

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(1985); *see also* Webb Resources v. McCoy, 401 P.2d 879, 890 (Kan. 1965).

[41]*See Container Corp.*, 463 U.S. at 188, 77 L. Ed. 2d at 568 (Formula apportionment and separate accounting are "two distinct methods of allocating the income of a multinational enterprise.").

[42]The commerce clause is set forth in article I, § 8 of the United States Constitution:

> The Congress shall have Power To . . . regulate Commerce with foreign Nations, and among the several States, and with the Indian tribes; . . .

commerce. *Complete Auto Transit v. Brady,* 430 U.S. 274, 279, 51 L. Ed. 2d 326, 331 (1977). The nexus and fair apportionment factors have been discussed in the previous due process section. We now turn to a consideration of the other two factors of the *Complete Auto Transit* test.

The oil companies contend that the Oil Tax violates the commerce clause because it inevitably results in overlapping or duplicative taxation, thus discriminating against businesses engaged in interstate commerce. They claim that recent United States Supreme Court decisions on the subject of multiple taxation render the Oil Tax unconstitutional, citing *Japan Line v. County of Los Angeles,* 441 U.S. 434, 60 L. Ed. 2d 336 (1979), *Mobil Oil v. Commissioner of Taxes,* 445 U.S. 425, 63 L. Ed. 2d 510, and *Exxon v. Wisconsin Department of Revenue,* 447 U.S. 207, 65 L. Ed. 2d 66. We disagree.

In *Japan Line,* six Japanese companies challenged a California property tax on shipping containers. The Japanese-owned containers were subject to a property tax on 100% of their value in their home port of Japan. Under California's tax, all containers in the state on a specified tax day were subject to an apportioned *ad valorem* property tax. The companies contended that California's tax, as applied to their containers, created multiple taxation and violated the commerce clause.

The Court in *Japan Line* assumed that the *Complete Auto Transit* test was met. However, because taxation of instrumentalities of foreign commerce was at issue, the Court found it necessary to inquire whether California's tax, notwithstanding its fair apportionment, created a substantial risk of international multiple taxation. 441 U.S. at 451, 60 L. Ed. 2d at 349. In this regard, the Court contrasted taxation of interstate instrumentalities with that of international instrumentalities:

> In order to prevent multiple taxation of interstate commerce, this Court has required that taxes be apportioned among taxing jurisdictions, so that no instrumentality of commerce is subjected to more than one tax on its full value. The corollary of the apportionment principle, of course, is that no jurisdiction may tax the instrumentality in full. "The rule which permits taxation by two or more states on an apportionment basis precludes taxation of all of the property by the state of the domicile. . . . Otherwise there would be multiple taxation of interstate operations." The basis for this Court's approval of apportioned property taxation, in other words, has been its ability to enforce full apportionment by all potential taxing bodies.

441 U.S. at 446-47, 60 L. Ed. 2d at 347 (citations omitted). While the Court could require apportionment among the states for property taxation purposes, it obviously could not prevent Japan from taxing 100% of the value of the containers. The Court held California's nondiscriminatory tax unconstitutional because it resulted in actual multiple taxation of instrumentalities of international commerce.[43]

The oil companies in the present litigation argue that if Alaska had been the home port instead of Japan in *Japan Line*, the Supreme Court would have invalidated Alaska's 100% *ad valorem* tax. We agree that Alaska would not be entitled to apply a property tax to the full value of instrumentalities of foreign commerce. But the oil compa-

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[43]The Court indicated that it need not decide "under what circumstances the mere *risk* of multiple taxation would invalidate a state tax, or whether this risk would be evaluated differently in foreign, as opposed to interstate, commerce." 441 U.S. at 452 n.17, 60 L. Ed. 2d at 350 n.17 (emphasis in original).

nies' attempt to equate a property tax on the full value of goods used in foreign commerce with the Oil Tax is inappropriate. While the single situs property tax may be analogous to the specific allocation by situs method of income taxation, it is a totally different species from separate accounting.[44] The Oil Tax, as a separate accounting division-of-income method, does not automatically conflict with an apportionment method and result in double taxation.[45] Because separate accounting and formula apportionment can coexist without overlapping tax bases, *Japan Line* does not require invalidation of the Oil Tax.[46]

In *Mobil Oil v. Commissioner of Taxes*, 445 U.S. 425, 63 L. Ed. 2d 510, the Court upheld the constitutionality of the inclusion of foreign source dividend income in the total income subject to taxation by Vermont. Mobil argued that Vermont could not tax its dividend income because New York, the state of commercial domicile, had the power under the commerce clause to allocate all of the dividend income to itself. Allowing Vermont to tax a share of the income by apportionment would, therefore, result in double taxation if New York implemented such a

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[44]*See* discussion *supra* section II. A. 2.

[45]*Container Corp.*, 463 U.S. at 194-95, 77 L. Ed. 2d at 572.

[46]There is language in *Japan Line* to the effect that an "unapportioned" tax will not be sustained. 441 U.S. at 447, 60 L. Ed. 2d at 347. However, this statement must be read in context. In the property tax area, separate accounting is not even a viable theory for dividing income. Allocation of the full property to one state or apportionment among several states are the only two options. Since allocation of the full property value to one of several proper taxing jurisdictions is unconstitutional, apportionment is the only permissible means of dividing the value of property used in interstate commerce for property taxation purposes.

tax. In this situation, the Court considered the risk of multiple taxation to be sufficient since the specific allocation by situs method was "theoretically incommensurate" with apportionment.[47] The Court found that if one method were constitutionally preferable, a tax based on the other method could not be sustained. 445 U.S. at 444-45, 63 L. Ed. 2d at 525.

Instead of accepting Mobil's argument that specific allocation by situs was preferable, the Court found apportionment to be the better approach. While the Court chose not to rule on the constitutionality of a hypothetical New York tax, the Court stated that in theory New York could not exclusively tax Mobil's dividend income since

> the dividends reflect income from a unitary business, part of which is conducted in other states. In that situation, the income bears relation to benefits and privileges conferred by several states. These are the circumstances in which apportionment is *ordinarily* the accepted method.

Id. at 446, 63 L. Ed. 2d at 526 (emphasis added).

Several months after the *Mobil* case, the Court decided *Exxon v. Wisconsin Department of Revenue,* 447 U.S. 207, 65 L. Ed. 2d 66. *Exxon*, like this litigation, involved state taxation of oil production income. Exxon's activities in Wisconsin were limited to the marketing of petroleum products. Exxon challenged Wisconsin's inclusion of oil production income in the income subject to apportionment by Wisconsin. Exxon argued that production of oil and marketing of oil were two distinct operations. In Exxon's view, since it could illustrate by separate accounting that these two activities were distinct, Wiscon-

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[47] *Cf. Moorman*, 437 U.S. at 277, 57 L. Ed. 2d at 207.

sin could not constitutionally include production income in the tax base for apportionment.

Exxon contended that the commerce clause required the allocation of all income derived from exploration and production functions to the situs state, rather than inclusion in the apportionment formula. Exxon asserted that since the producing state was constitutionally entitled to allocate all production income to itself, non-producing states could not tax an apportioned share of this same income.

To this, the Supreme Court replied:

> We do not agree. As was the case with income from intangibles, there is nothing "talismanic" about the concept of situs for income from exploration and production of crude oil and gas. Presumably, the States in which appellant's crude oil and gas production is located are permitted to tax in some manner the income derived from that production, there being an obvious nexus between the taxpayer and those States. However, "there is no reason in theory why that power should be exclusive when the [exploration and production income as distinguished through separate functional accounting] reflect[s] income from a unitary business, part of which is conducted in other States. In that situation, the income bears relation to benefits and privileges conferred by several States. These are the circumstances in which apportionment is ordinarily the accepted method."
>
> In short, the Commerce Clause does not require that any income which a taxpayer is able to separate through accounting methods and attribute to exploration and production of crude oil and gas be allocated to the States in which those production centers are located. *The geographic location of such raw*

> *materials does not alter the fact that such income is part of the unitary business of the interstate enterprise and is subject to fair apportionment among all States to which there is a sufficient nexus with the interstate activities of the business.*

447 U.S. at 229-30, 65 L. Ed. 2d at 85 (emphasis added; citations omitted).

Basically, both the oil companies and the state view *Japan Line, Mobil* and *Exxon* as prohibiting allocation of oil production income entirely to the situs state. The debate focuses on whether the Oil Tax allocates all oil production income to Alaska, as the oil companies contend, or is instead a distinct method of dividing the production income, as the state contends. Because we hold that the Oil Tax is a distinct method of dividing oil production income by use of separate accounting, its constitutional validity is not directly determined by these three cases.[48]

While *Mobil* and *Exxon* indicate the Court's strong endorsement of the use of apportionment formulas, the Court clearly implied that the use of separate accounting is constitutionally permissible under the commerce clause.[49] The constitutional preference for apportionment of "unitary" dividend income in *Mobil* stemmed from the fact that the two competing methods at issue -- specific allocation and formula apportionment — were "theoreti-

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[48]*See* W. Hellerstein, Memorandum to Mr. Milton Barker (April 20, 1981) (discussing proposed Oil Tax). [Record 17,091]

[49]In both *Exxon* and *Mobil*, the Court stated that separate accounting "is not constitutionally required." *Exxon*, 447 U.S. at 223, 65 L. Ed. 2d at 81; *Mobil*, 445 U.S. at 438, 63 L. Ed. 2d at 521.

cally incommensurate." *Mobil*, 445 U.S. at 444, 63 L. Ed. 2d at 525.[50]

The type of duplicative taxation found unacceptable in *Japan Line*, *Exxon* and *Mobil* all involved one taxing jurisdiction using the specific allocation by situs method, while another used apportionment. In other words, one taxing jurisdiction taxed the whole pie, while another taxed a slice. In such a situation, double taxation is inevitable, and one method has to be chosen over another. By contrast, in *Moorman Manufacturing v. Bair*, 437 U.S. 267, 57 L. Ed. 2d 197, two jurisdictions used different apportionment formulas. Each took only a slice of the pie, but since they used different formulas to divide the pie, the Court recognized that there was high probability of some overlap. While the potential for overlap existed, it certainly was not inevitable, and the Court upheld Iowa's apportionment method. The Court held that prevention of duplicative taxation should be effected by a national uniform rule for the division of income, but that the "Constitution . . . is neutral with respect to the content of any uniform rule." *Id.* at 279, 57 L. Ed. 2d at 208. Given the absence of federal legislation, the Court was unwilling to specify that a particular methodology was constitutionally preferable. While acknowledging a clear risk of multiple taxation in a variety of situations due to the divergence in division-of-income techniques employed by the various states, the Court found such risk preferable to choosing one technique as constitutionally superior to another. *Id.* at 278-80, 57 L. Ed. 2d at 207-09.

The oil companies in the present litigation acknowledge that *Moorman* evidenced the Supreme Court's high degree of tolerance for apportionment formulas. But in their

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[50]*See* W. Hellerstein, *supra* note 48, at 2. [Record 17,093]

view, this tolerance does not extend beyond the apportionment method. They claim that *Moorman* does not sanction the use of Alaska's Oil Tax because the tax is not apportioned. We disagree. First, as we have previously explained, the Oil Tax utilizes a division-of-income method. Second, while *Moorman* pertained to the conflict presented when two jurisdictions employ different types of formula apportionment, the principle of the opinion was that non-uniform state taxes are inevitable and constitutionally permissible. Since *Moorman*, the Court has continued to maintain that states enjoy broad leeway in their choice of division-of-income methods. *See Container Corp. of America v. Franchise Tax Board*, 463 U.S. at 164, 77 L. Ed. 2d at 552.

Container Corp. closely resembles the situation in this case. In *Container Corp.*, California sought to determine its share of total income by use of formulary apportionment, while foreign jurisdictions employed separate accounting.[51] Discussing discrimination against interstate commerce, the Court reiterated its view that the Constitution does not require the elimination of all overlapping taxation on the interstate level. 463 U.S. at 171, 77 L. Ed. 2d at 557. Thus, if the problem were limited to the interstate level, "the fact that different jurisdictions applied different methods of taxation . . . would probably make little constitutional difference." 463 U.S. at 185, 77 L. Ed. 2d at 566.

In *Container Corp.*, the Court faced the additional complication of international commerce. Even so, the Court upheld the tax, distinguishing *Japan Line* on the ground that Japan's specific allocation by situs method necessarily resulted in double taxation.

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[51] *See* discussion *supra* section IV. B.

> Here, by contrast, we are faced with two distinct methods of allocating the income of a multi-national enterprise. The "arm's-length" approach [i.e., separate accounting] divides the pie on the basis of formal accounting principles. The formula apportionment method divides the same pie on the basis of a mathematical generalization. Whether the combination of the two methods results in the same income being taxed twice or in some portion of income not being taxed at all is dependent solely on the facts of the individual case.

463 U.S. at 188, 77 L. Ed. 2d at 568 (footnote omitted). The Court held that the two taxing methods do "not create an *automatic* 'asymmetry'." *Id.* at 194-95, 77 L. Ed. 2d at 572. "[I]t would be perverse, [therefore,] simply for the sake of avoiding double taxation, to require California to give up one allocation method that sometimes results in double taxation in favor of another allocation method that also sometimes results in double taxation." *Id.* at 193, 77 L. Ed. 2d at 571. The fact that the Court found the two methods could coexist on the international level, where duplicative taxation is viewed more strictly, makes separate accounting a quite permissible alternative when only interstate commerce is involved, as is the case in the present litigation.

The Supreme Court has repeatedly recognized that neither separate accounting nor formula apportionment will result in the attribution of the exact amount of income earned in the state to that particular state. Some multiple taxation may result when one jurisdiction employs one method and another uses a different approach. This threat is inherent in any system where state attribution methods are nonuniform. But a state does not offend the commerce clause merely because its method of divid-

ing income is different from that of its neighbors. *Moorman Manufacturing v. Bair*, 437 U.S. at 278-80, 57 L. Ed. 2d at 208-09.

We have already explained that the separate accounting method employed by the State of Alaska does not tax all profits generated from Alaskan oil production and does not impermissibly attribute extraterritorial values to Alaska. Using the leeway it retains absent a federal uniform approach, the Alaska legislature chose a constitutionally permissible method of income division, albeit not the one "ordinarily" employed for most other types of unitary businesses.

We hold that the Oil Tax comports with the requirements of the *Complete Auto Transit* test and creates no impermissible burden on interstate commerce. The location of the oil fields in Prudhoe Bay creates a substantial "nexus" between the oil companies' activities and the State of Alaska.[52] As discussed above, the Oil Tax is fairly apportioned to represent only that part of the companies' income generated from its Alaskan activities — oil and gas production and transportation. As in *Container Corp.*, the Oil Tax does not inevitably result in multiple taxation. Moreover, any possible overlap created by Alaska's use of separate accounting and other jurisdictions' use of different income division methods is not the fault, in the constitutional sense, of Alaska. Thus, the Oil Tax does not discriminate against interstate commerce. Finally, because the oil companies all benefit from the "substantial

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[52]*See* Exxon v. Wisconsin Dep't of Revenue, 447 U.S. at 229, 65 L. Ed. 2d at 85.

privilege"[53] of extracting oil in Alaska, the Oil Tax is fairly related to services provided in the state.

D. *Federal and State Equal Protection*

The oil companies assert that the Oil Tax violates both state and federal equal protection since it "arbitrarily [and] irrationally subject[s] a special group of taxpayers to treatment not accorded taxpayers at large." They argue, in effect, that using a distinct method of taxation for multistate oil companies, but not for any other unitary businesses, violates equal protection. We reject the oil companies' equal protection challenge.

The analysis under Alaska's equal protection clause involves a three-step process. *Alaska Pacific Assurance v. Brown*, 687 P.2d 264, 269-70 (Alaska 1984) [hereinafter cited as ALPAC]; *State v. Ostrosky*, 667 P.2d 1184, 1192-94 (Alaska 1983), *appeal dismissed*, ___ U.S. ___, 81 L. Ed. 2d 339 (1984); *State v. Erickson*, 574 P.2d 1, 11-12 (Alaska 1978).[54] First, in order to ascertain the appropriate level of review, the nature of the constitutional interest affected must be identified. *ALPAC*, 687 P.2d at 269. Next, the validity of the statutes' purpose must be analyzed in light of the interest impinged. *Id.* Lastly, the means chosen must be examined, also in light of the

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[53] *See* Commonwealth Edison v. Montana, 453 U.S. at 628-29, 69 L. Ed. 2d at 901.

[54] In determining questions of equal protection under the Alaska Constitution, we employ a single test. As we stated in State v. Erickson, 574 P.2d 1, 12 (Alaska 1978):

> Such a test will be flexible and dependent upon the importance of the rights involved. Based on the nature of the right, a greater or lesser burden will be placed on the state to show that the classification has a fair and substantial relation to a legitimate governmental objective.

interest, to insure that they are sufficiently related to the goals of the statute. *Id.* at 269-70.

The interest involved here, freedom from disparate taxation, lies at the low end of the continuum of interests protected by the equal protection clause.[55] Regarding the statute's purpose, the oil companies claim that greed and other improper motives led the Alaska legislature to enact the Oil Tax. The state, however, has adequately established that a primary purpose of the Oil Tax was to rectify a perceived underestimation of oil production and pipeline transportation income that occurred with the application of an apportionment formula. The goal was to insure that the tax rate assessed to the oil companies on this income was commensurate with the rate applicable to the income of other corporations in the state. Ch. 110, § 1, SLA 1978. Taxing the oil companies differently to rectify a perceived inequity was the legislature's attempt to prevent disparate treatment; thus, the validity of this purpose in light of the companies' interest is established. Finally, the means chosen were sufficiently related to the goals of the legislation. The use of separate accounting, rather than formula apportionment, increased the amount of production and transportation income subject to Alaska taxation and more fairly represented the extent of the business activities of the oil companies in Alaska.

The Oil Tax did not adversely affect any fundamental interest, nor did it contain a suspect classification. Thus, to be upheld under the federal analysis, it need only to have been rationally related to a legitimate state interest. *Exxon v. Eagerton*, 462 U.S. 176, 195-96, 76 L. Ed. 2d 497, 513 (1983). The rational basis standard is particularly

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[55] *See* Regan v. Taxation with Representation of Washington, 461 U.S. 540, 547, 76 L. Ed. 2d 129, 138 (1983). *See generally* P. Hartman, *supra* note 8, § 3.1, at 131-38.

easy to meet in the area of taxation. The United States Supreme Court has stated that "[l]egislatures have especially broad latitude in creating classifications and distinctions in tax statutes." *Regan v. Taxation with Representation of Washington*, 461 U.S. 540, 547, 76 L. Ed. 2d 129, 138 (1983). The Oil Tax clearly bore a rational relationship to the state's goal of correcting a perceived inequity in the tax structure.

While the oil companies dispute the underlying premise that the Oil Tax rectifies inequities, the legislature could have reasonably concluded that the Oil Tax would more accurately compute the companies' income generated in Alaska. Thus, the Oil Tax survives the equal protection challenge, under both the United States and the Alaska Constitutions.

E. *Contract Clause*

The oil companies argue that the Oil Tax is invalid because it impairs the obligation of the state's lease contracts with them.[56] They contend that the tax increases the state's share under the lease contracts, and that such modification of the terms of the leases violates the contract clause of the United States Constitution.[57]

This argument is without merit. No lease provision has been impaired. In entering into the leases the state could

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[56]Beginning in 1964 the state entered into lease contracts with the oil companies, whereby the state sold the companies whatever gas and oil might be found on the leaseholds in exchange for "bonus" payments and royalties of 12½%.

[57]"No State shall . . . pass any . . . Law impairing the Obligation of Contracts. . . ." U.S. Const., art. I, § 10, cl. 1.

not,[58] and did not, contract away its power as a sovereign to tax income earned in the state. *Merrion v. Jicarilla Apache Tribe*, 455 U.S. 130, 71 L. Ed. 2d 21 (1982) disposes of this issue:

> Contractual arrangements remain subject to subsequent legislation by the presiding sovereign. Even where the contract at issue requires payment of a royalty for a license or franchise issued by the governmental entity, the government's power to tax remains unless it "has been specifically surrendered in terms which admit of no other reasonable interpretation." *St. Louis v. United R. Co.*, 210 U.S. 266, 280, 52 L. Ed. 1054, 28 S. Ct. 630 (1908).

455 U.S. at 148, 71 L. Ed. 2d at 36 (citations omitted); *see also Exxon v. Eagerton*, 462 U.S. at 187-94, 76 L. Ed. 2d at 508-12.

VIII. RETROACTIVITY OF THE OIL TAX

The Oil Tax Act was signed into law on July 8, 1978.[59] Section 4 of the Act provided that it would apply retroactively to January 1, 1978. Section 5 provided the Act would be "effective" immediately. While the Senate voted 16 to 4 to approve section 5, the entire Oil Tax Act only passed by a vote of 11 to 9. Thus, at no time did more than 11 senators vote to approve section 4.

The companies argue that the Act may not constitutionally be made applicable to income earned prior to July 8, 1978. They interpret article II, § 18 of the Alaska Consti-

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[58]The Alaska Constitution provides: "The power of taxation . . . shall not be . . . contracted away, except as provided in this article." Alaska Const. art. IX, § 1.

[59]Ch. 110, SLA 1978.

tution[60] and AS 01.10.070(a)[61] as requiring the approval of two-thirds majority of each house of the legislature to give retroactive effect to a new law. The companies argue that even though a two-thirds vote was attained for an immediate effective date, a two-thirds vote was also required to enact section 4, applying the Act retroactively to January 1, 1978. We disagree.

AS 01.10.090 states that "[n]o statute is retrospective unless expressly declared therein." A two-thirds vote requirement does not appear in that section, nor elsewhere in Alaska law. The legislature, however, has recognized that where retroactive application of a portion or all of a bill is desired, an immediate effective date, which does require a two-thirds vote under article II, § 18 and AS 01.10.070(a), should be used in conjunction with the retroactivity section. Legislative Affairs Agency, *Manual of Legislative Drafting* 11 (1977); Uniform Rules of the Alaska State Legislature, Rule 10 (May 3, 1977). Accordingly, because two-thirds of the legislature voted to make the Oil Tax Act immediately effective, a separate two-thirds vote for the Act to be retroactive was not constitutionally required. The Oil Tax was properly retroactive to January 1, 1978.

The superior court's action in granting the state's motion for summary judgment is AFFIRMED.

[Statutory Appendix omitted; see App. C.]

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[60]Alaska Const. art. II, § 18 provides:

> Laws passed by the legislature become effective ninety days after enactment. The legislature may, by concurrence of two-thirds of the membership of each house, provide for another effective date.

[61]AS 01.10.070(a) contains language paralleling Alaska Const. art. II, § 18.

II. Memorandum of Decision and Order Granting Summary Judgment of the Superior Court of the State of Alaska, Third Judicial District, dated May 27, 1983.

IN THE SUPERIOR COURT
FOR THE
STATE OF ALASKA
THIRD JUDICIAL DISTRICT

No. 3AN 79-1903

ATLANTIC RICHFIELD COMPANY, ET AL.,
Plaintiffs,

v.

STATE OF ALASKA, ET AL.,
Defendants.

No. 3AN 80-1542

EXXON CORPORATION, ET AL.,
Counterclaimants,

v.

STATE OF ALASKA, ET AL.,
Defendants on Counterclaim.

MEMORANDUM OF DECISION AND
ORDER GRANTING SUMMARY JUDGMENT

This case involves a motion for summary judgment by the defendant to declare the Oil and Gas Corporate Income Tax Act, AS 43.21, constitutional. Counsel have been most helpful in delineating the issues and citing the appropriate authorities.

The plaintiffs challenge AS 43.21 on the grounds that it violates the due process, equal protection and commerce clauses of the United States Constitution and the equal protection clause and Art. II, sec. 18, Alaska Constitu-

tion, and is in violation of AS 43.19, the multistate tax compact.

The plaintiffs assert that genuine issues of material fact exist which precludes the grant of a motion for summary judgment. I find that the disputes over the existence of facts do not preclude the grant of summary judgment. *Ault v. Alaska State Mortgage Association*, 387 P.2d 698, 701 (Alaska 1963). Further, the asserted issues of material fact do not preclude summary judgment in any event because they are facts only in the sense that they provide premises in the process of legal reasoning, they are not that type of fact for which a trial is mandated.

A detailed analysis of the statute, its history, and the arguments on both sides could be set forth. However, there is no purpose in reiterating what counsel have so ably done. In addition, the patina of revenue rulings, cases and economic theories are taken into account without explication.

The due process challenge is without merit because there is more than a minimal connection between Alaska, the taxing state, and the activities of the taxpayer reached by the taxing statute and the income attributed to Alaska is rationally related to values connected with Alaska (there is no requirement of arithmetical perfection). *Mobil Oil Corp. v. Commissioner of Taxes*, 445 U.S. 425 (1980) and *Moorman Manufacturing Co. v. Bair, Director of Reveune of Iowa*, 437 U.S. 267 (1978).

The plaintiff's equal protection argument is answered by reviewing *State v. Erickson*, 574 P.2d 1 (Alaska 1978). The state's approach to taxing income under the statute in question does not violate the equal protection clauses of either the United States or Alaska Constitutions.

The commerce clause challenge is overcome if the tax in question is applied to an activity with a substantial contact with the taxing state, the tax is fairly apportioned and if the tax is fairly related to the services provided by the state. *Complete Auto Transit, Inc. v. Brady,* 430 U.S. 274 (1977) and *Commonwealth Edison Co. v. Montana,* 101 S.Ct. 2946 (1980). All of those tests are met in this case.

The other points raised by the plaintiffs as precluding the grant of summary judgment are not well taken and, therefore,

IT IS ORDERED that the defendant's motion for summary judgment is granted.

DATED at Anchorage, Alaska, this 27th day of May, 1983.

/s/ Victor D. Carlson
Victor D. Carlson
Superior Court Judge

This is to certify that a copy of the above Memorandum of Decision was mailed on the 27th day of May, 1983 to:

Ralph I. Miller, Esq.
William B. Rozell, Esq.
George J. Dunn, Esq.
Robert J. Mahoney, Esq.
Attorney General
David A. Nelson, Esq.
Barry L. Wertz, Esq.
Robert E. McManus, Esq.
Richard O. Gantz, Esq.
O'Melveny & Myers
Barry L. Wertz, Esq.
William L. Lutz, Jr.
George J. Dunn, Esq.

/s/ Ruth E. Willard
Secretary to Judge Carlson

III. Order for Final Judgment of the Superior Court of the State of Alaska, Third Judicial District, dated July 6, 1983 and effective May 27, 1983.

[Caption omitted]

ORDER FOR FINAL JUDGMENT

This action having been heard on motion by defendants and defendants on counterclaim, State of Alaska, et al., for summary judgment dismissing all counts of the complaints and counterclaim herein, and this court having granted defendants motion by order dated May 27, 1983,

IT IS HEREBY ORDERED that defendants shall have judgment against plaintiffs and counterclaimants, dismissing all counts of the complaints and counterclaim herein, and that defendants recover their costs in the amount of $4,000,000 and attorneys fees in the amount of $534,355.54 from plaintiffs and counterclaimants.

This judgment is effective 5-27-83.

DATED: 7-6-83

/s/Victor D. Carlson
Superior Court Judge

[Certification of service omitted]

IV. Judgment of the Superior Court of the State of Alaska, Third Judicial District, dated July 5, 1983.

[Caption omitted]

JUDGMENT

The court having granted a motion for summary judgment on May 27, 1983, judgment consistent therewith is

hereby granted pursuant to Rule 58(b)(2), Alaska Rules of Civil Procedure.

DATED at Anchorage, Alaska, this 5th day of July, 1983.

/s/Victor D. Carlson
Victor D. Carlson
Superior Court Judge

[Certification of service omitted]

B. NOTICE OF APPEAL.

IN THE SUPREME COURT
OF THE
STATE OF ALASKA
Alaska Supreme Court
File No. S-52
Opinion No. 2965
Superior Court Nos.
3AN-79-1903 Civil
3AN-80-1542 Civil
ATLANTIC RICHFIELD COMPANY, ET AL.,
Appellants,
v.
STATE OF ALASKA, ET AL.,
Appellees.

Appeal from the Superior Court
Third Judicial District
Hon. Victor D. Carlson, Judge

NOTICE OF APPEAL TO THE
SUPREME COURT OF THE UNITED STATES

PLEASE TAKE NOTICE that Exxon Corporation, Exxon Pipeline Company, Atlantic Richfield Company, ARCO Pipe Line Company, BP Alaska Inc., Sohio Alaska

Petroleum Company, and Sohio Pipe Line Company hereby appeal, pursuant to 28 U.S.C. Section 1257(2), to the Supreme Court of the United States from the final judgment and decision on appeal in this case entered by this court on August 16, 1985.

DATED this 5th day of November, 1985.

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By /s/ Carl J.D. Bauman
Carl J.D. Bauman

AFFIDAVIT OF SERVICE

STATE OF ALASKA
THIRD JUDICIAL DISTRICT } ss.

Sally O'Donnell, being first duly sworn on oath, deposes and says:

1. I am over the age of eighteen years, and not a party to or interested in the within action. My business address is Denali Towers North, 2550 Denali Street, Suite 700, Anchorage, AK 99503-2774. I am employed by Faulkner, Banfield, Doogan & Holmes.

2. On this 6th day of November, 1985, I served the within Notice of Appeal to the Supreme Court of the United States upon all parties required to be served, to-wit, by depositing a true copy thereof in the United States mail box at Anchorage, Alaska, in a sealed envelope with first-class postage prepaid and addressed to counsel of record as follows:

Deborah Vogt
Assistant Attorney General
State Capitol
Pouch K
Juneau, Alaska 99811

Harold Brown
Attorney General
State Capital
Pouch K
Juneau, Alaska 99811

/s/ Sally O'Donnell

SUBSCRIBED & SWORN TO before me this 6th day of November, 1985.

/s/ Jan Cress

NOTARY PUBLIC for Alaska.
My Commission Expires:
October 25, 1988

C. CONSTITUTIONAL PROVISIONS, STATUTES AND REGULATIONS.

U.S. Constitution, Art. I, Section 8:

The Congress shall have Power . . .

To regulate Commerce with foreign Nations, and among the several States, and with the Indian Tribes.

U.S. Constitution, Amendment XIV, § 1:

nor shall any State deprive any person of life, liberty, or property, without due process of law; nor deny to any person within its jurisdiction the equal protection of the laws.

AS 43.19.010, Multistate Tax Compact, Art. IV:

1. As used in this Article, unless the context otherwise requires:

> (a) "Business income" means income arising from transactions and activity in the regular course of the taxpayer's trade or business and includes income from tangible and intangible property if the acquisition, management, and disposition of the property constitute integral parts of the taxpayer's regular trade or business operations.

. . .

9. All business income shall be apportioned to this State by multiplying the income by a fraction, the numerator of which is the property factor plus the payroll factor plus the sales factor, and the denominator of which is three.

AS 43.20, Net Income Tax Act:

Sec. 43.20.011(e). There is imposed for each taxable year upon the entire taxable income of every corporation

derived from sources within the state a tax consisting of a normal tax equal to 5.4 percent of taxable income, and a surtax which is equal to 4.0 percent of taxable income, except that the tax on a corporation doing business in the state which derives income from the production or pipeline transportation of crude oil or natural gas in the state shall be determined and paid in accordance with AS 43.21.

Sec. 43.20.065. Allocation and apportionment. A taxpayer who has income from business activity which is taxable both inside and outside the state or income from other sources both inside and outside the state shall allocate and apportion his net income as provided in the Multistate Tax Compact (AS 43.19), or as provided by this chapter.

AS 43.21, Oil and Gas Corporate Income Tax:

Sec. 43.21.010. Application. This chapter applies to every corporation doing business in the state which derives income from the production of oil or gas from a lease or property in the state or from the pipeline transportation of oil or gas in the state. The tax calculated under this chapter is measured by the total taxable income of the corporation during the tax period as determined under AS 43.21.020-43.21.040 and is calculated at the rates established under AS 43.20.011(e).

Sec. 43.21.020. Determination of taxable income from oil and gas production. (a) The taxable income of a corporation from the production of oil and gas from a lease or property in the state shall be the corporation's net income as calculated by the department in accordance with this section.

(b) Gross income of a corporation from oil and gas production shall be the gross value at the point of produc-

tion of oil or gas produced from a lease or property in the state. The department shall by regulation determine a uniform method of establishing the gross value at the point of production. In making its determination the department may use the actual prices or values received for the oil or gas, the posted prices for the oil or gas in the same field, or the prevailing prices or values of oil or gas in the same field. In addition, in its determination of gross value at the point of production of oil or gas produced from a lease or property, the department shall determine the reasonable costs of transportation from the point of sale to the point of production of the oil or gas. Transportation costs set by a tariff properly on file with the Alaska Pipeline Commission or other regulatory agency shall be considered prima facie reasonable, but if a tariff properly on file with a regulatory agency is subsequently amended, changed, or overturned retroactively, the reasonable costs of transportation shall be recomputed for that period using the newly determined tariff.

(c) Net income from oil and gas production shall be determined by the department by deducting from gross income the following:

(1) royalties paid in kind or in value;

(2) taxes imposed under AS 43.55 and AS 43.57 which are actually paid or incurred by the corporation on the production from a lease or property in the state;

(3) taxes imposed under AS 43.56 and AS 29.53 which are actually paid or incurred by the corporation on property used directly in the production of oil or gas from a lease or property in the state, including property used in production, gathering, treatment or preparation of the oil or gas for pipeline transportation, but only if those property tax payments were

due and payable only after the date of commercial production from the lease or property with which the property was associated;

(4) the direct costs incurred by or for the corporation in operating the lease or property, including the direct costs of producing, gathering, treating or preparing the oil or gas for pipeline transportation, but net of any payments received for those activities and not including any indirect cost or overhead expense;

(5) depreciation (using the unit of production method or such other reasonable methods as the department may by regulation establish) on property used directly in the production, gathering, treatment or preparation of the oil or gas for pipeline transportation including amortization of capitalized interest for investments in this property at a rate not to exceed the average cost of borrowed capital to the taxpayer during the year in which it is capitalized;

(6) the amortization of lease acquisition payments and taxes paid or incurred under AS 43.56 and AS 29.53 (including capitalized interest on both) for or on producing properties before the commencement of commercial production from the lease or property for which the property is being used;

(7) interest expense of the corporation not capitalized during construction, that was paid or incurred in connection with property in Alaska; however, unless (f) of this section applies, the interest expenses may not exceed that portion of the total interest paid by the consolidated business of which the corporation is a part, determined by multiplying the total interest by a fraction, the numerator of which is the value of the corporation's real and tangible personal property used directly in the pro-

duction of oil or gas from a lease or property in the state and the denominator of which is the value of all real and tangible personal property of the consolidated business; in this subsection, "total interest paid by the consolidated business" does not include interest expense arising from intercompany obligations within the consolidated business except to the extent that the interest expense reflects a pass-through of interest on a third-party borrowing by the parent or other member of the consolidated business with the purpose, expressed at the time of the third-party borrowing, of financing Alaska business activity of the taxpayer corporation;

(8) expenses incurred by the corporation after December 31, 1977 of unsuccessful exploration of oil or gas in the state including the acquisition costs of abandoned properties, dry hole costs, and the cost of geologic and geophysical exploration related to those abandoned properties;

(9) general overhead or administrative expense incurred by the corporation attributable to deriving income from the production of oil or gas from a lease or property in the state to the extent, except as provided in (f) of this section, that it does not exceed that portion of the total general overhead or administrative expense incurred by the consolidated business of which the corporation is a part, determined by multiplying the total general overhead or administrative expense by a fraction, the numerator of which is the value of the corporation's real and tangible personal property used directly in the production of oil or gas from a lease or property in the state and the denominator of which is the value of all real and

tangible personal property of the consolidated business;

(10) the amount of income from the production of oil and gas from a lease or property that is divided among the regional Native corporations under sec. 7(i) of the Alaska Native Claims Settlement Act (P.L. 92-203);

(11) the tax imposed by sec. 4986 of the Internal Revenue Code that is paid or incurred by the taxpayer for oil production from leases or properties in the state.

(d) Deductions from gross income under this section shall not include expenses previously deducted on a return filed under AS 43.20.

(e) Where a corporation subject to this chapter shares the production or proceeds of the production from a lease or property through a working interest, royalty interest, overriding royalty interest, production payment, net profit interest, joint venture or other agreement, the department shall allocate the deductions from gross income between the corporation and the persons with whom it has such an agreement in accordance with the terms of the agreement.

(f) If a corporation demonstrates to the satisfaction of the department that it paid or incurred actual expenses for interest or for general overhead or administration attributable to deriving income from the production of oil or gas from a lease or property in the state in an amount greater than the amount determined under (c)(7) or (c)(9) of this section, the department may allow the corporation to deduct the greater amount.

Sec. 43.21.030. Determination of income from oil and gas pipeline transportation. (a) Except as provided in

(c) of this section, taxable income attributable to the transportation of oil in a pipeline engaged in interstate commerce in Alaska shall be determined by the department and shall be the amount reported or that would be required to be reported to the Federal Energy Regulatory Commission or its successors as net operating income, less those portions of interest and general administrative expense attributable to the pipeline transportation of oil in the state, except that taxable income shall also include taxes on or measured by income. The department shall establish regulations governing the determination of interest and general administrative expense attributable to pipeline transportation of oil in the state.

(b) Except as provided in (c) of this section, taxable income attributable to the transportation of natural gas in a pipeline engaged in interstate commerce in Alaska shall be determined by the department and shall be the amount reported or that would be required to be reported to the Federal Energy Regulatory Commission as net operating income less that portion of interest and general administrative expense attributable to pipeline transportation in the state, except that the taxable income shall also include taxes on or measured by income. The department shall establish regulations governing the determination of interest and general administrative expense attributable to pipeline transportation of natural gas in the state.

(c) Taxable income attributable to the transportation of oil or natural gas in Alaska of any corporation not under the Federal Regulatory Commission jurisdiction, or of a corporation under the jurisdiction of the Federal Energy Regulatory Commission but not reporting the operation of pipelines in Alaska separately from the operation of pipelines elsewhere, shall be determined by the department and shall be based upon an amount equal

to that which would have been reported to the Federal Energy Regulatory Commission under (a) of this section in the case of oil pipelines, or (b) of this section in the case of natural gas pipelines, had the corporation been, in fact, under Federal Energy Regulatory Commission jurisdiction for the taxable year and required to report on the operation of Alaska pipeline separately from the operation of pipelines elsewhere.

Sec. 43.21.040. Determination of income from activities other than oil and gas production or pipeline transportation. (a) Taxable income of a corporation subject to this chapter form activities in this state other than the production of oil or gas from a lease or property in the state or the pipeline transportation of oil or gas in the state shall be determined in accordance with the method established in art. IV of AS 43.19.010 and in AS 43.20.071, as modified by (b) — (f) of this section.

(b) The total taxable income of the consolidated business is its entire income less the portion of that entire income attributable to worldwide production and pipeline transportation of oil and gas. In this section,

(1) for a member of a consolidated business who is required to file under the Internal Revenue Code, "entire income" means taxable income under Subtitle F and chapter 1 of Subtitle A of the Internal Revenue Code of 1954, as amended, except that those provisions adopted after December 31, 1975, which change or modify exemptions from tax are not adopted by reference as a part of this section until the second January 1 following the effective date of the federal law;

(2) for a member of a consolidated business who is not required to file under the Internal Revenue Code, "entire income" means book income, except that a

taxpayer may elect to report his income as the income would be determined under (1) of this subsection.

(c) The numerator and denominator of the property factor, of the payroll factor and of the sales factor shall be calculated without reference to that portion of property, payroll or sales directly related to the production of oil or gas from a lease of property in the state or the pipeline transportation of oil or gas in the state.

(d) The value attributed to vessels transporting Alaskan oil or gas of the consolidated business which are not owned or effectively owned by the consolidated business shall be excluded from the property factor.

Sec. 43.21.050. Assessment of income and tax. (a) The department shall assess taxable income and the amount of tax payable on that taxable income.

(b) On or before August 15 of each year the department shall send to every corporation taxable under this chapter a notice of assessment showing the amount of income taxable under this chapter for the previous year and the amount of tax payable on that taxable income.

(c) For purposes of this chapter the department may combine taxable incomes of corporations subject to tax under this chapter who are part of the same consolidated business.

(d) If the methods of allocation and apportionment provided in this chapter do not fairly represent the extent of a corporation's business activity in the state, the corporation may petition for or the department may require, in respect to all or any part of the corporation's business activity, if reasonable, the employment of any method authorized under art. IV, sec. 18, of the multistate tax compact (AS 43.19.010) to effectuate an equita-

ble allocation and apportionment of a corporation's income. The commissioner shall include in his annual report required in AS 43.21.110 a report on all relief granted under this subsection, including for each case a statement of the changes in tax liability resulting from the granting of relief, the tax years involved, and a description of the method of determining taxable income that was substituted for those provided in this chapter.

Sec. 43.21.060. Returns. On or before April 15 of each year, a corporation subject to tax under this chapter shall submit a return in a form prescribed by the department setting out information required by the department to determine taxable income. For purposes of this chapter, the department may require corporations subject to tax under this chapter who are part of the same consolidated business to file a single return.

Sec. 43.21.070. Payment of tax. The tax levied under this chapter is payable to the department; on or before September 30 of each year or in installments, including prepayments of estimated tax, at the times and under the conditions the department may by regulation require. This tax is payable on the due date set out in this section even though the assessment is under appeal or the validity, enforceability or application of this chapter or any provision of this chapter is challenged before the department or in the courts.

Sec. 43.21.080. Transitional rules. The department shall provide by regulation transition rules for corporations subject to tax under ch. 20 of this title before the effective date of this Act to avoid double taxation of the same income or double deduction of the same expense of those corporations as a result of becoming subject to tax under this chapter.

Sec. 43.21.090. Regulations. The department may adopt regulations in accordance with the Administrative Procedure Act (AS 44.62) as appropriate to administer and enforce this chapter.

Sec. 43.21.100. Penalties. The penalties established in ch. 20 of this title apply to this chapter.

Sec. 43.21.110. Public reporting. (a) The commissioner of revenue shall compile and transmit to the legislature an annual consolidated report of state revenues and taxation policies under this chapter. This report shall include total aggregate income tax paid by corporations covered under this chapter and aggregate income and deductions by category, so classified as to prevent the identification of particular returns or reports.

(b) The legislative auditor shall transmit to the legislature an annual report reviewing the actions of the department in administering this chapter.

Sec. 43.21.120. Definitions. Unless the context requires otherwise the definitions contained in AS 43.55.140 are applicable to this chapter. In addition, in this chapter

(1) "base of operations" means the closest point on land to the offshore oil or gas production operations from which goods, services and supplies flow to those offshore oil or gas production operations;

(2) "consolidated business" means a corporation or group of corporations having more than 50 percent common ownership, direct or indirect, or a group of corporations in which there is common control either direct or indirect as evidenced by any arrangement, contract or agreement.

AS 44.62.240:

If a regulation adopted by any agency under this chapter is primarily legislative, the regulation has prospective effect only. A regulation adopted under this chapter, which is primarily an "interpretative regulation," has retroactive effect only if the agency adopting it has adopted no earlier inconsistent regulation and has followed no earlier course of conduct inconsistent with the regulation. Silence or failure to follow any course of conduct is considered earlier inconsistent conduct.

AS 44.62.640:

In AS 44.62.010—44.62.320, unless the context otherwise requires,

. . .

(2) "regulation" means every rule, regulation, order, or standard of general application or the amendment, supplement or revision of a rule, regulation, order or standard adopted by a state agency to implement, interpret, or make specific the law enforced or administered by it, or to govern its procedure, except one which relates only to the internal management of a state agency; "regulation" does not include a form prescribed by a state agency or instructions relating to the use of the form, but this provision is not a limitation upon a requirement that a regulation be adopted under this chapter when one is needed to implement the law under which the form is issued; "regulation" includes "manuals," "policies," "instructions," "guides to enforcement," "interpretative bulletins," "interpretations," and the like, which have the effect of rules, orders, regulations or standards of general application, and this and similar phraseology shall not be used to avoid or circumvent this chapter; whether a regulation, regardless of name, is covered by this chapter depends in part on whether it affects the public or is used by the agency in dealing with the public.

CHAPTER 21.

OIL AND GAS CORPORATE INCOME TAX REGULATIONS

Article

1. Application of Tax
(15 AAC 21.001 — 15 AAC 21.090)
2. Taxable Income from Oil and Gas Production
(15 AAC 21.100 — 15 AAC 21.290)
3. Taxable Income from Oil and Gas Pipelines
(15 AAC 21.300 — 15 AAC 21.490)
4. Taxable Income Apportioned to Alaska
(15 AAC 21.500 — 15 AAC 21.590)
5. Transition Rules
(15 AAC 21.600 — 15 AAC 21.690)
6. Administration
(15 AAC 21.700 — 15 AAC 21.890)
7. General Provisions
(15 AAC 21.900 — 15 AAC 21.9790)

ARTICLE 1.

APPLICATION OF TAX

Section

1. Findings of fact
3. Determinations based on findings of fact
5. Requirement of alternative allocation and apportionment method
10. Persons subject to this chapter
20. Taxpayers having income from other activities
30. Consolidated businesses
40. Attribution of income
50. Net taxable income
60. Surtax exemption
65. Tax rates
70. Treatment of net losses realized under this chapter
80. (Reserved)
90. (Reserved)

15 AAC 21.001. FINDINGS OF FACT. Based upon the entire legislative history culminating in the passage of

ch. 110, SLA 1978, and also the legislative history of ch. 113, SLA 1980, and ch. 116, SLA 1981, and, after reviewing in depth the tax returns of corporations engaged in oil and gas production or pipeline transportation in the state, the department finds that

(1) the three-factor formula set out in AS 43.19.010, Art. IV, does not fairly or fully represent the income-producing activity in the state or the income earned in the state of corporations engaged in oil and gas production or pipeline transportation in the state;

(2) specifically, the property factor, payroll factor, and sales factor in combination do not accurately represent the value of activity relating to or associated with the extraction and transportation of nonrenewable resources of oil and gas in the state; and

(3) the application of the three-factor formula in AS 43.19.010, Art. IV, results in a total distortion of the income-producing activities and income earned by corporations engaged in oil and gas production and pipeline transportation because little weight is given to the tremendous raw wealth represented by the oil and gas produced from a lease or property in the state or transported in the state, or both. (Eff. 2/22/79, Reg. 69; am 5/21/81, Reg. 78; am 3/26/82, Reg. 81)

Authority: AS 43.05.010; AS 43.05.080; AS 43.19.010 (Art. IV, sec. 18); AS 43.20.065; AS 44.25.020.

15 AAC 21.003. DETERMINATIONS BASED ON FINDINGS OF FACT. Under AS 43.19.010, Art. IV, sec. 18, and based upon the findings contained in 15 AAC 21.001 for the purpose of the tax imposed under AS 43.21, the department has determined that

(1) the allocation and apportionment provisions of AS 43.19.010, Art. IV, secs. 1-17, do not fairly or fully

represent the extent of a corporation's business activities in the state with respect to the production or pipeline transportation of oil or gas in the state; and

(2) the method of allocation and apportionment adopted by the legislature in AS 43.21 more accurately represents the extent of business activity of corporations engaged in oil and gas production, pipeline transportation, or both, in the state, than do the allocation and apportionment provisions of AS 43.19.010, Art. IV, secs. 1-17. (Eff. 2/22/79, Reg. 69; am 5/21/81, Reg. 78; am 3/26/82, Reg. 81)

Authority: AS 43.05.010; AS 43.05.080; AS 43.19.010 (Art. IV, sec. 18); AS 43.20.065; AS 44.25.020.

15 AAC 21.005. REQUIREMENT OF ALTERNATIVE ALLOCATION AND APPORTIONMENT METHOD. Pursuant to AS 43.19.010, Art IV, sec. 18, and based upon the findings and determinations in 15 AAC 21.001 and 15 AAC 21.003, a corporation doing business in the state which derives income from the production of oil or gas from a lease or property in the state, or from the pipeline transportation of oil or gas in the state, or both, shall compute its income under the methods prescribed in AS 43.21 and this chapter. (Eff. 2/22/79, Reg. 69; am 5/21/81, Reg. 78)

Authority: AS 43.05.010; AS 43.05.080; AS 43.19.010 (Art. IV, Sec. 18); AS 43.20.065; AS 44.25.020

15 AAC 21.010. PERSONS SUBJECT TO THIS CHAPTER. (a) A corporation doing business in the state and deriving income from one or more of the following souces is subject to the provisions of this chapter, even if that income is more than offset during a year by expenses associated with it:

(1) a production interest in one or more leases or properties in commercial production that are within the state; or

(2) repealed 5/21/81;

(3) the transportation of oil or gas or both by means of a pipeline or pipeline system of which part or all is within the state.

(b) The right under sec. 7(i) of the Alaska Native Claims Settlement Act to share in revenue from oil or gas production from a regional Native corporation's land is not a production interest in that property, and therefore a corporation deriving income from oil and gas production solely by virtue of secs. 7(i) and 7(j) of the Alaska Native Claims Settlement Act is not subject to the provisions of this chapter. (Eff. 2/22/79, Reg. 69; am 5/21/81, Reg. 78; am 3/26/82, Reg. 81)

Authority: AS 43.05.010; AS 43.05.080; AS 43.19.010 (Art. IV, sec. 18); AS 43.21.010; AS 43.21.020; AS 43.21.090; AS 44.25.020.

15 AAC 21.020. TAXPAYERS HAVING INCOME FROM OTHER ACTIVITIES. A taxpayer deriving income from one or more sources in addition to any of those listed in 15 AAC 21.010 is subject to the requirements and income tax liability under AS 43.21 and this chapter only, for all of its income. (Eff. 2/22/79, Reg. 69)

Authority: AS 43.05.080; AS 43.19.010 (Art. IV, sec. 18); AS 43.20.011; AS 43.21.010; AS 43.21.040; AS 43.21.090.

15 AAC 21.030. CONSOLIDATED BUSINESS. (a) A group of two or more corporations that are directly or indirectly controlled or more than 50-percent owned (directly or through one or more intermediaries) by one

common person (corporate or otherwise) is a consolidated business for purposes of this chapter.

(b) The income, expenses, and assets of a consolidated business include, respectively, all income, expenses and assets attributed to it under 15 AAC 21.040.

(c) If a corporation or consolidated business is controlled (by a means characteristic of ownership rather than through the exercise of general governmental powers such as laws, regulations, judicial decisions, proclamations, and the like) or more than 50-percent owned by a sovereign, head of state, government or governmental agency, the consolidated business does not include the sovereign, head of state, government or governmental agency for purposes of this chapter. (Eff. 2/22/79, Reg. 69; am 5/21/81, Reg. 78)

Authority: AS 43.05.080; AS 43.19.010 (Art. IV, sec. 18); AS 43.21.050; AS 43.21.090; AS 43.21.120.

15 AAC 21.040. ATTRIBUTION OF INCOME. (a) The income, expenses and assets of an enterprise involving undivided joint ownership must be attributed to the joint owners of that enterprise on the basis of their respective ownership interests, as may be modified by agreement among those joint owners. For purposes of this section, partnerships, joint ventures, trusts with joint beneficiaries and similar legal entities (but not a corporation) are enterprises involving undivided joint ownership.

(b) If a corporation doing business in the state conducts, through one or more noncorporate intermediaries, operations that generate income for those intermediaries which would make them subject to tax under AS 43.21 and this chapter if they were corporations, then that corporation is presumed to derive income from those operations in the amount of the income earned by those

intermediaries and therefore subject to tax under this chapter. Such a corporation's tax is calculated using the revenues and deductions of the intermediaries, as if the corporation were directly conducting the operations actually conducted by the intermediaries. (Eff. 2/22/79, Reg. 69)

Authority: AS 43.05.080; AS 43.19.010 (Art. IV, sec. 18); AS 43.21.050; AS 43.21.090; AS 43.21.120.

15 AAC 21.050. NET TAXABLE INCOME. (a) A taxpayer's 5.4-percent tax and 4-percent surtax under AS 43.21 and this chapter for a year are on the taxpayer's net taxable income for that year as determined under (b) of this section, except that the surtax will be computed on that net taxable income minus the surtax exemption specified in 15 AAC 21.060.

(b) A taxpayer's net taxable income for a year is that taxpayer's taxable production income under 15 AAC 21.100 for that year, plus that taxpayer's taxable oil pipeline income under 15 AAC 21.300 for that year, plus that taxpayer's taxable gas pipeline income under 15 AAC 21.400 for that year, plus that taxpayer's taxable apportioned income under 15 AAC 21.500 for that year, and minus all net losses of that taxpayer that are being carried back or carried forward to that year from one or more other tax years in accordance with 15 AAC 21.070. If the taxpayer's income under one or more of 15 AAC 21.100, 15 AAC 21.300, 15 AAC 21.400 and 15 AAC 21.500 reflects a loss, the total of the losses under those sections is offset against the total gain (if any) under the rest of those sections. (Eff. 2/22/79, Reg. 69)

Authority: AS 43.05.080; AS 43.19.010 (Art. IV, sec. 18); AS 43.20.011; AS 43.21.010; AS 43.21.020; AS 43.21.030; AS 43.21.040; AS 43.21.050; AS 43.21.090.

15 AAC 21.060. SURTAX EXEMPTION. A taxpayer's surtax exemption shall be calculated in accordance with AS 43.20.011(e) and AS 43.20.021(a). The surtax exemption for tax year 1978 is $50,000. The surtax exemption, if any, for tax years after 1978 will be an amount determined under AS 43.20. (Eff. 2/22/79, Reg. 69)

Authority: AS 43.05.080; AS 43.19.010 (Art. IV, sec. 18); AS 43.20.011; AS 43.20.021; AS 43.21.010; AS 43.21.050; AS 43.21.090.

15 AAC 21.065. TAX RATES. Tax obligations arising under AS 43.21 and this chapter for tax years beginning before January 1, 1981, must be computed by using the surtax exemption allowed by 15 AAC 21.060 and the rates set out in 15 AAC 21.050. For tax years beginning after December 31, 1980, the tax rate schedule set out in AS 43.20.011 as reenacted by ch. 116, SLA 1981, must be used to compute tax obligations arising under AS 43.21 and this chapter without regard to the tax rates set out in 15 AAC 21.050 and the surtax exemptions allowed by 15 AAC 21.060. (Eff. 3/26/82, Reg. 81)

Authority: AS 43.05.080; AS 43.19.010 (Art. IV, sec. 18); AS 43.20.011; AS 43.21.010; AS 43.21.020; AS 43.21.030; AS 43.21.040; AS 43.21.050; AS 43.21.090.

15 AAC 21.070. TREATMENT OF NET LOSSES REALIZED UNDER THIS CHAPTER. (a) A taxpayer realizes a net loss under this chapter if the taxpayer's net taxable income under 15 AAC 21.050 for that year is less than zero.

(b) A taxpayer's net loss may be carried back not more than three tax years before the tax year for which it is realized (but in no event before the 1978 tax year) and may be carried forward, if necessary, as far as the 15th tax year following the tax year for which it is realized.

This carrying back and carrying forward must be on a first-in, first-out basis; that is, the tax loss must first be carried back as an offset against the taxpayer's net taxable income, if any, for the third preceding tax year, and any remaining tax loss must next be applied as an offset against the taxpayer's net taxable income, if any, for the second preceding tax year, and so on until either the tax loss is fully used as offsets against the taxpayer's net taxable income under AS 43.21 and, after December 31, 1981, AS 43.20 or until it has been carried forward into the 15th year following the tax year in which the net loss is realized. Any net loss from a tax year still remaining after the 15th following tax year will be lost.

(c) If a taxpayer has net losses from more than one tax year that may be applied as offsets against the taxpayer's net taxable income for the same tax year, the net loss from the earliest of those tax years must first be applied, then the net loss from the second earliest of those tax years must be applied, assuming that the earliest tax loss does not fully offset the net taxable income against which it is applied, and so on. (Eff. 2/22/79, Reg. 69; am 3/26/82, Reg. 81)

Authority: AS 43.05.080; AS 43.19.010; (Art. IV, sec. 18); AS 43.21.020; AS 43.21.090.

15 AAC 21.080 — 15 ACC 21.090. Reserved.

ARTICLE 2.
TAXABLE INCOME FROM OIL AND GAS PRODUCTION

Section

100. Taxable production income
110. Gross production revenue
120. Value at the point of production
122. Sales price
124. Prevailing value for oil
125. Prevailing value for gas
128. Choice of methods for determining reasonable cost of tranportation
130. Calculation of reasonable costs of transportation
140. Extraordinary production revenue (or loss)
150. (Reserved)
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170. (Reserved)
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190. (Reserved)
200. Deductions from gross production revenue — In general
210. Deduction for royalty
215. Deduction for Native corporation revenue sharing
220. Deduction for production taxes
230. Deduction for ad valorem taxes
235. Deduction for crude oil windfall profit tax
240. Deduction for direct operating costs
250. Deduction for acquisition costs
260. Deduction for development costs

270. Deduction for exploration costs

280. Deduction for uncapitalized interest

290. Deduction for general overhead and administrative expense

15 AAC 21.100. TAXABLE PRODUCTION INCOME. A taxpayer's taxable production income during a year equals the total of the taxpayer's gross production revenue (determined in accordance with 15 AAC 21.100 — 15 AAC 21.130) during that year for each lease or property in the state in which the taxpayer has a production interest, plus the total of the taxpayer's extraordinary production revenue (determined in accordance with 15 AAC 21.140), if any, during that year for each lease or property in the state in which the taxpayer has a production interest, minus the total of the taxpayer's deductions for that year under 15 AAC 21.200 — 15 AAC 21.290, and minus the total of the taxpayer's extraordinary production loss (determined in accordance with 15 AAC 21.140), if any, during that year for each lease or property in the state in which the taxpayer has a production interest. (Eff. 2/22/79, Reg. 69)

Authority: AS 43.05.080; AS 43.19.010; (Art. IV, sec. 18); AS 43.21.020; AS 43.21.090.

15 AAC 21.110. GROSS PRODUCTION REVENUE. A taxpayer's gross production revenue during a year from a production interest in a lease or property is the value at the point of production of the taxpayer's gross share of the oil and gas produced from (or allocated to) that lease or property; however, oil or gas that is used, flared or unavoidably lost in the production operations for the lease or property or is injected into a reservoir in the course of the operations for the same field, may not be included in determining the taxpayer's gross production

revenue from that or any other lease or property. (Eff. 2/22/79, Reg. 69)

Authority: AS 43.05.080; AS 43.19.010; (Art. IV, sec. 18); AS 43.21.020; AS 43.21.090.

15 AAC 21.120. VALUE AT THE POINT OF PRODUCTION. (a) The gross value at the point of production for a taxpayer's oil or gas equals the sales price under 15 AAC 21.122 for that oil or gas, less the taxpayer's reasonable costs of transportation under 15 AAC 21.128 and 15 AAC 21.130 for that oil or gas from its point of production to its sales delivery point, and less the taxpayer's reasonable costs (not otherwise deducted under this chapter) incurred downstream of the point of production for processing, conditioning, and preparing gas and gas plant liquids for sale; unless

(1) subsection (b) of this section applies, in which case the gross value at the point of production for that oil or gas is the prevailing value under 15 AAC 21.124 or 15 AAC 21.125 for that oil or gas, less the reasonable costs of transportation under 15 AAC 21.128 and 15 AAC 21.130 for that oil or gas from its point of production to its sales delivery point (or, if different, to the point where prevailing value is calculated under 15 AAC 21.124 or 15 AAC 21.125) and less the taxpayer's reasonable costs incurred downstream of the point of production for processing, conditioning, and preparing gas and gas plant liquids for sale; or

(2) the gross value at the point of production for the taxpayer's oil or gas would exceed the applicable maximum lawful price (if any) set by the U.S. Department of Energy, the Federal Energy Regulatory Commission, another governmental agency or a court of law (adjusted for any changes in value because of any processing, conditioning, preparation, and transportation of that oil or gas

occurring between its point of production and the point at which the applicable maximum lawful price is effective) in which case the gross value at the point of production is that applicable maximum lawful price as adjusted for the changes in value.

(b) Prevailing value under 15 AAC 21.124 and 15 AAC 21.125 must be used in determining the gross value at the point of production for a taxpayer's oil or gas if

(1) the circumstances relating to the disposition of the taxpayer's oil or gas show fraud or an intent to evade taxes; or

(2) the sales price under 15 AAC 21.122 for that oil or gas is substantially lower (determined by analyzing the cash value of the consideration received for that oil or gas and the degree of difference between the prevailing value and the sales price for that oil or gas, the quantity of oil or gas involved in the transaction, and the duration of the transaction) than the prevailing value under 15 AAC 21.124 and 15 AAC 21.125 for that oil or gas, and one or more of the following conditions exist:

(A) the contract under which the taxpayer's oil or gas is sold or exchanged is executed or renegotiated after December 31, 1979, and either sets a price for that oil or gas without adjustments tied to market conditions, or does not provide for later renegotiation of prices at market rates;

(B) the contract sets a price which does not reasonably reflect market conditions for production from that field or area prevailing at the time the contract is executed or renegotiated; or

(C) the contract price under which the taxpayer's oil or gas is sold or exchanged reflects an unusually weak bargaining position on the taxpayer's part be-

cause of circumstances which the taxpayer could reasonably have foreseen and taken steps to ameliorate or avoid.

(c) As used in this section and 15 AAC 21.122, 15 AAC 21.124, 15 AAC 21.125 and 15 AAC 21.900, the terms "exchange" and "exchanged" do not include transactions where a taxpayer transfers oil to a third party at the Port of Valdez or at another port in Alaska for purposes of operational necessity or convenience in what otherwise would be a bona fide, arm's-length exchange but for the fact that at the time of the particular transfer the taxpayer expects subsequently to receive a like amount of similar quality oil from that third party at the same port. Such a transfer to a third party and the subsequent transfer from the third party, when they occur, will be disregarded and the oil subject to that transfer will be treated as if it had remained in the possession of the transferring taxpayer pending final disposition of that oil. (Eff. 2/22/79, Reg. 69; am 5/21/81, Reg. 78)

Authority: AS 43.05.080; AS 43.19.010; (Art. IV, sec. 18); AS 43.21.020; AS 43.21.090; AS 43.21.120

15 AAC 21.122. SALES PRICE. (a) The sales price for purposes of this chapter for first sales of a taxpayer's oil or gas to one or more third parties is the cash value of the full consideration being given in receipt for that oil in those sales.

(b) If a taxpayer's oil or gas is being sold to an affiliate of that taxpayer (as opposed to being transferred from one division to another within the same corporate person), the sales price of that oil or gas for purposes of this chapter is the greater of

(1) the cash value of the full consideration given in receipt for the oil or gas so sold; or

(2) the price attributable to that sale which is entered on the taxpayer's books and records in accordance with generally accepted accounting principles, consistently applied.

(c) If a taxpayer's oil or gas is retained by the taxpayer or is transferred from the production division to another division within the same corporate person, the sales price of that oil or gas for purposes of this chapter is the price attributable to the production division for that oil or gas which is entered on the taxpayer's books and records in accordance with generally accepted accounting principles, consistently applied.

(d) If a taxpayer exchanges oil or gas with a third party, the sales price of that oil or gas for purposes of this chapter is

(1) the price prescribed in the exchange agreement for the taxpayer's oil or gas for purposes of settling accounts and cashing out any net exchange balances in the taxpayer's favor (to illustrate what is meant by a net exchange balance in the taxpayer's favor, suppose the exchange is for oil on a barrel-for-barrel basis and the taxpayer's volume to the third party exceeds the volume received from the third party: the amount of that excess would be the net exchange balance in the taxpayer's favor); or

(2) if there is no such price prescribed in the exchange agreement, the price attributable to the oil or gas received by the taxpayer which is entered on the taxpayer's books in accordance with generally accepted accounting principles, consistently applied. (Eff. 5/21/81, Reg. 78)

Authority: AS 43.05.080; AS 43.19.010 (Art. IV, sec. 18); AS 43.21.020; AS 43.21.090; AS 43.21.120.

15 AAC 21.124. PREVAILING VALUE FOR OIL. (a) For a taxpayer's oil, the prevailing value for purposes of this chapter is the arithmetic average acquisition cost C.I.F. (at the refinery inlet in the same market in which the taxpayer's Alaskan oil is refined) based on the sales price of like oil sold in up to three third-party, arm's-length transactions selected by the department, if disclosure of the sales price information is permitted by the parties to those transactions at the time of an audit of the taxpayer. In this subsection, "like oil" means an oil of substantially similar quality produced in the same general area of the state and subject to the same federal price controls, if any, as the oil for which the prevailing value is to be determined.

(b) If the information under (a) of this section may not be disclosed or is unavailable, then the prevailing value for purposes of this chapter equals the arithmetic average acquisition cost C.I.F. (at the refinery inlet in the same market in which the taxpayer's Alaskan oil is refined) of up to six oils selected by the department including

(1) up to three domestic oils of substantially similar quality which are sold in significant quantities in the same market or near the same market; and

(2) up to three imported oils of substantially similar quality which are sold in significant quantities in the same market or near the same market.

(c) The respective acquisition cost C.I.F. at the refinery inlet in a market for each of the sources of oil used in this section equals the sum of

(1) the respective official government sales price or posted price of the oil (with adjustments for differentials and surcharges) appearing in the latest Platt's Oilgram

Price Report published on or before the last day of a month; plus

(2) the respective tanker transportation cost of the oil from its port of origin to ship's rail in the same market as that in which the taxpayer's Alaskan oil is refined, to be calculated

(A) by multiplying the London Tanker Broker's average freight rate assessment ("AFRA") applicable to that voyage during that month for AFRA LR 2 (Long range 2) oil tankers, by the most recently published Worldscale rate for that voyage; or

(B) by applying another applicable freight rate if foreign flat vessels are prohibited from transporting that oil; plus

(3) any canal tolls and expenses not included in the applicable freight rate for that voyage; plus

(4) pipeline or other carrying charges. (Eff. 5/21/78)

Authority: AS 43.05.080; AS 43.55.020(f); AS 43.55.110

15 AAC 21.125. PREVAILING VALUE FOR GAS. For a taxpayer's gas, the prevailing value for purposes of this chapter is

(1) the volume-weighted average of the prices received under the terms of sales contracts for significant quantities which have been entered into or whose pricing provisions have been amended during the tax year or the two preceding years at the sales delivery points within the same market for that production by the taxpayer in arm's-length sales transactions for like kind, character, and quality Alaskan gas produced during the month; or

(2) if the taxpayer makes no arm's-length sales of significant quantities at the sales delivery points within

the same market for like kind, character, and quality Alaskan gas produced during the month, the volume-weighted average of the prices under the terms of arm's-length sales contracts for significant quantities of gas from the same field as the taxpayer's gas (whether between third parties or not) which were entered into or the pricing provisions of which were amended during the tax year or the two preceding years (or if there are no contracts which comply with this paragraph for that field, contracts which comply with this paragraph in the nearest field to that field), with appropriate adjustments for differences, if any, in kind, character, and quality between gas sold under the reference sales contracts and the taxpayer's gas. (Eff. 5/21/81, Reg. 78)

Authority: AS 43.05.080; AS 43.19.010 (Art. IV, sec. 18); AS 43.21.020; AS 43.21.090; AS 43.21.120.

15 AAC 21.128. CHOICE OF METHODS FOR DETERMINING REASONABLE COST OF TRANSPORTATION. The reasonable cost of transportation is the actual cost of transportation as determined in 15 AAC 21.130(a) and (b). However, the reasonable cost of transportation is the fair market value as defined in 15 AAC 21.130(c) if the department determines that all of the following conditions exist:

(1) the parties to the transportation of oil or gas are affiliated;

(2) the contract for the transportation of oil or gas is not an arm's-length transaction or is not representative of the market value of the transportation at the time the contract was executed or renegotiated; and

(3) the method of transportation of oil or gas is not reasonable in view of the existing alternative methods of

transportation at the time the taxpayer entered into the transportation commitment. (Eff. 5/21/81, Reg. 78)

Authority: AS 43.05.080; AS 43.19.010, (Art. IV, sec. 18); AS 43.21.020; AS 43.21.090; AS 43.21.120.

15 AAC 21.130. CALCULATION OF REASONABLE COSTS OF TRANSPORTATION. (a) Reasonable costs of transportation are calculated from the point of production to the sales delivery point.

(b) Actual costs of transportation for purposes of 15 AAC 21.128 are

(1) if the transportation of oil or gas is by a regulated carrier, the tariff on file with FERC or other regulatory agency having jurisdiction that applies to that transportation of the oil or gas by the carrier, from the point that oil or gas is tendered into the facilities of the carrier to the point that it is delivered from the facilities of the carrier;

(2) if transportation of oil is by a tanker or other vessel that is not owned or effectively owned by the taxpayer

(A) for a single voyage charter, the charter fee for that vessel, plus any voyage and port costs not included in that fee which are incurred with respect to that transportation during the term of the charter and which are borne by the taxpayer, plus the positioning cost, if any, borne by the taxpayer for that vessel;

(B) for a voyage charter or a time charter, the charter fee for that vessel, plus any voyage and port costs not included in that fee which are incurred with respect to that transportation during the term of the charter and which are borne by the taxpayer, plus the positioning cost (amortized over the lesser of 36

months or the term of the charter in the case of a time charter, and amortized on the basis of the number of voyages in the case of a consecutive voyage charter), if any, borne by the taxpayer for that vessel; or

(C) for a contract of affreightment, the affreightment fee specified in that contract, plus any voyage and port costs and any positioning costs not included in that fee which are incurred with respect to that transportation during the term of the contract of affreightment which are borne by the taxpayer;

(3) if transportation of oil is by a tanker or other vessel that is owned or effectively owned by the taxpayer, the taxpayer's actual cost for that transportation, which is the sum of

(A) voyage and port costs incurred with respect to that transportation;

(B) the positioning cost, amortized over 36 months, for that vessel;

(C) depreciation of the vessel; if the vessel is actually owned by the taxpayer, depreciation must be calculated in accordance with the applicable FASB Financial Accounting Standards for this asset; if the vessel is effectively owned by the taxpayer, depreciation must be calculated in accordance with FASB-13 from the standpoint of a lessee under a capital lease; and

(D) an amount which, when added to the amount of depreciation included under (C) of this paragraph, will provide a reasonable return on the acquisition cost of the vessel over its expected life; for purposes of this subparagraph

(i) "acquisition cost" means the cost of the vessel which may be capitalized by its actual owner in accordance with generally accepted accounting principles, including costs of improvements made after the date the vessel is placed in service by or on behalf of the taxpayer; and

(ii) "expected life" means the period of time used to calculated depreciation under (C) of this paragraph;

(4) in the case of transportation of gas as LNG

(A) if only a part of the LNG transportation facilities are subject to tariff regulations by FERC or other agencies of the United States, state or territory or a possession of the United States or a foreign nation and if the taxpayer does not have or effectively have any ownership interest in the LNG transportation facility, the amount charged to the taxpayer for that LNG transportation;

(B) if the taxpayer has or effectively has an ownership interest in the LNG transportation facility, the taxpayer's actual cost for that transportation which is sum of

(i) the direct operating costs of the LNG transportation facility (in the case of an LNG tanker, its respective voyage and port costs) incurred with respect to the taxpayer's gas;

(ii) the positioning cost, amortized over 36 months, for that vessel;

(iii) depreciation of the LNG transportation facility, if the facility is actually owned by the taxpayer, depreciation must be calculated in accordance with the applicable FASB Financial Ac-

counting Standards for the owner of these assets; if the LNG transportation facility is effectively owned by the taxpayer, depreciation must be calculated in accordance with FASB-13 from the standpoint of a lessee under a capital lease; and

(iv) an amount which, when added to the amount of depreciation allowed under (iii) of this subparagraph, provides a reasonable return on the acquisition cost of the LNG transportation facility over its expected life, for purposes of this sub-subparagraph "acquisition cost" means the cost of the LNG transportation facility which may be capitalized by its actual owner in accordance with generally accepted accounting principles, including the cost of improvements made after the date the LNG transportation facility is placed in service by or on behalf of the taxpayer, and "expected life" means the period of time used to calculate depreciation under (iii) of the subparagraph;

(5) If the transportation of oil or gas is by a nonregulated pipeline facility that is not owned or effectively owned by the producer of that oil or gas, the transportation fee specified in the contract plus any other costs not included in the fee with respect to that transportation which are borne by the producer;

(6) if the transportation of oil or gas is by a nonregulated pipeline facility that is owned or effectively owned by the producer of that oil or gas, the amount which would have been reported to the FERC or other regulatory agency having jurisdiction applicable to the transportation of oil or gas under (1) of this subsection if the transportation had been under the jurisdiction of FERC or other regulatory agency for the tax reporting period.

(c) The fair market value of transportation for the purpose of determining the reasonable cost of transportation under 15 AAC 21.128 is determined

(1) for shipments of oil, on the basis of third-party charters (that is, time charter in which the taxpayer does not own or effectively own the vessel) of like vessels of one year or more, plus regulated transportation costs determined under (b)(1) of this section; two vessels will be considered like vessels for purposes of comparing like transportation under this chapter if the difference between them in tonnage is less than 10,000 deadweight tons and if they are both Jones Act vessels, or are both CDS/ODS vessels, or

(2) for shipments of gas as LNG, on the basis of third-party charters or leases (that is, charters or leases in which the taxpayer does not own or effectively own the LNG transportation facility in question) of three years or more which are reported to the department for like LNG transportation facilities, plus regulated transportation costs determined under (b)(1) of this section.

(d) If a taxpayer sells its oil or gas to a third party in what would otherwise be a bona fide, arm's-length sale but at the time of the sale the taxpayer expects to repurchase that oil or gas at a later time and place, then that sale to the third party and the repurchase from the third party, when it occurs, will be disregarded and the oil and gas subject to that sale will be treated as if it has remained the taxpayer's own oil or gas throughout the time between that sale and repurchase. In determining the value at the point of production in this case, the reasonable cost of transportation between the point of sale for that sale and the point of repurchase must be determined as if the taxpayer were the shipper. This subsection does not apply if the taxpayer's expected repurchase does not occur.

(e) For purposes of this section, "voyage and port costs" for a vessel are

(1) costs actually incurred for fuel for the vessel while in port and at sea, stores and provisions for the vessel and captain and crew, wages and benefits of the vessel's captain and crew, routine maintenance, port and dock fees, storage costs, demurrage, tug and pilotage fees, marine agent's fees in port, lightering, trans-shipment charges, customs fees and duties, regular and customary gratuities which are lawfully paid, insurance premiums paid to third-party insurers, minor cargo losses or measuring differentials, loading and unloading inspection fees, Panama Canal transit fees, a reasonable management fee (to be prorated equally among vessels) for coordinating arrivals and departures into and out of ports for vessels owned, effectively owned or chartered by the taxpayer, and other reasonable costs associated with the operation or maintenance (or both) of the vessel and

(2) in addition to the costs set out in (1) of this subsection, in the case of catastrophic loss or damage of a vessel transporting oil or LNG from Alaska or enroute to Alaska to take on oil or LNG, a part of the loss (for loss or damage to the ship, for injury or loss of the captain or crew and for damage and cleanup due to spillage of part or all of her cargo, but not for the loss of the cargo itself) which is borne by the shipper as the result of that catastrophic loss or damage and which is not reimbursed by insurance or by a third party; this part of the loss is determined by allocating the unreimbursed liability on the basis of deadweight tonnage among the vessels owned, effectively owned or chartered by the shipper to transport oil or LNG (whichever was lost) from Alaska.

(f) A taxpayer "effectively owns," has "effective ownership" or "effectively has an ownership interest" in a

vessel, LNG transportation facility, or nonregulated pipeline facility for purposes of this section, if

(1) the vessel, LNG transportation facility, or nonregulated pipeline facility is owned by another person comprising part of a consolidated business in which the taxpayer is also a part;

(2) the vessel, LNG transportation facility, or nonregulated pipeline facility is the subject of a capital lease in which the taxpayer (or another person comprising part of a consolidated business in which the taxpayer is also a part) is the lessee; or

(3) the vessel, LNG transportation facility, or nonregulated pipeline facility was built to the account of the taxpayer (or another person comprising part of the consolidated business in which the taxpayer is also a part), was sold and was chartered back by the taxpayer (or another person comprising part of a consolidated business in which the taxpayer is also a part) in a simultaneous transaction and the vessel or LNG transportation facility is on a term charter or lease to the taxpayer (or another person comprising part of a consolidated business in which the taxpayer is also a part) for 15 years or longer.

(g) For purposes of this chapter, the "positioning cost" for a vessel includes the costs not included in the charter for that vessel which are borne by the taxpayer for placing that vessel into position before the first voyage under that charter or the estimated costs to be borne by the taxpayer for delivering it up at a specified location after the last voyage under that charter, or both if the taxpayer is obligated under the terms of the charter or contract of affreightment to pay both costs.

(h) A reasonable rate of return under (b)(3)(D) or (b)(4)(B) of this section is presumed to be that amount which yields an internal rate of return (after federal income tax) on an investment which equals two percent plus the average annual national inflation rate (measured by the GNP deflator) during

(1) the period between the time the commitment is made to construct or acquire the vessel or LNG transportation facility and the time the vessel or LNG transportation facility has been received (or delivered) and is ready to be placed into service; or

(2) if the period in (1) of this subsection falls entirely within a calendar year, that entire calendar year.

(i) At the request of a taxpayer or on its own motion, the department will, in its discretion, replace the return under (h) of this section with one based on the rate of return imputed to that investment or similar ones by the person owning or effectively owning the vessel or LNG transportation facility.

(j) The third-party nature of an agreement between a taxpayer and a third-party carrier regarding transportation costs is not affected during the term of that agreement by a later consolidation of that taxpayer and carrier into a consolidated business, if, at the time they entered into that agreement, the taxpayer and the carrier did not exercise, directly or indirectly, any control over the business affairs of the other as the result of, or in anticipation of, their consolidation into the consolidated business.

(k) For purposes of this section, a "pipeline facility" includes all facilities incident to the pipeline transportation of oil or gas downstream from the point of production as defined in 15 AAC 21.900. (Eff. 2/22/79, Reg. 69; am 5/21/81, Reg. 78)

Authority: AS 43.05.080; AS 43.19.010 (Art. IV, sec. 18); AS 43.21.020; AS 43.21.090; AS 43.21.120.

15 AAC 21.140. EXTRAORDINARY PRODUCTION REVENUE (OR LOSS). (a) A taxpayer's extraordinary production revenue or loss for a lease or property is fully recognized for purposes of this chapter in the year in which it is realized. There is no carry-back or carry-forward of extraordinary production revenue or loss under this chapter to any other year, except to the extent that an extraordinary production loss may contribute to a taxpayer's net loss under 15 AAC 21.070. Multiple realizations of extraordinary production revenue or loss by a taxpayer during a single year are cumulative, with revenues added to revenues and losses to losses, and with revenues and losses offset against each other.

(b) A retroactive decrease or increase in the tariff or fee allowed to be charged by a regulated carrier for transporting a taxpayer's oil and gas produced from a lease or property in the state results in extraordinary production revenue or loss, respectively, for that taxpayer, which is realized for purposes of this chapter at the time when the retroactive change takes effect.

(c) A retroactive increase or decrease in the sales price in a bona fide, arm's length sale of a taxpayer's oil and gas produced from a lease or property in the state results in extraordinary production revenue or loss, respectively, for that taxpayer, which is realized for purposes of this chapter at the time when the retroactive change takes effect.

(d) The amount of a taxpayer's extraordinary production revenue or loss under (b) or (c) of this section for a lease or property is the amount of the increase or decrease, respectively, in the value at the point of production for the taxpayer's oil and gas from that lease or

property to which the retroactive tariff change or change in sales price applies, offset by any corresponding increase or decrease in deductions under 15 AAC 21.200 — 15 AAC 21.290 which change as the result of changing the value at the point of production for that oil and gas.

(e) In the case of catastrophic loss of a taxpayer's oil or gas that has passed its point of production but for which the risk of loss has not shifted from the taxpayer to a common carrier or a third party, the taxpayer realizes an extraordinary production loss for that oil or gas. The amount of the taxpayer's extraordinary loss in such a case equals the reasonable cost of transportation borne by the taxpayer for that oil or gas from its point of production to the point of its loss, plus the value at the point of production for that oil or gas but only to the extent that the value at the point of production for that oil or gas is included in the taxpayer's gross production revenue for the lease or property from (or to) which that oil or gas was produced (or allocated), and minus reimbursements to the taxpayer from insurance or from one or more third parties for that loss. (Eff. 2/22/79, Reg. 69)

Authority: AS 43.05.080; AS 43.19.010 (Art. IV, sec. 18); AS 43.21.020; AS 43.21.090.

15 AAC 21.150 — 15 AAC 21.190. (Reserved)

15 AAC 21.200. DEDUCTIONS FROM GROSS PRODUCTION REVENUE — IN GENERAL. (a) Unless otherwise specified, a taxpayer's costs giving rise to a deduction under 15 AAC 21.210 — 15 AAC 21.290 are regarded as being incurred on a cash basis or on an accrual basis, depending on which basis is used for purposes of the taxpayer's financial accounting.

(b) Costs previously claimed and actually deducted on one or more of a taxpayer's returns filed under AS 43.20

and 15 AAC 20 must be excluded from the costs to be used in calculating a deduction under 15 AAC 21.210 — 15 AAC 21.290.

(c) When a taxpayer incurs costs giving rise to a deduction under 15 AAC 21.210 — 15 AAC 21.290 and part or all of those costs are reimbursable to the taxpayer from one or more third parties, only the unreimbursed portion of those costs of the taxpayer may be used in calculating that deduction. (Eff. 2/22/79, Reg. 69)

Authority: AS 43.05.080; AS 43.19.010 (Art. IV, sec. 18); AS 43.21.020; AS 43.21.090.

15 AAC 21.210. DEDUCTION FOR ROYALTY. (a) The amount of royalty for a lease or property in a state that is paid during a year by or for a taxpayer is a deduction for purposes of determining the taxpayer's taxable production income for that year.

(b) The value at the point of production (determined on the basis of the value at the point of production for the taxpayer's production interest at the time when the royalty is delivered) of royalty for a lease or property in the state that is delivered in kind by or for a taxpayer during a year is a deduction for purposes of determining the taxpayer's taxable production income for that year. (Eff. 2/22/79, Reg. 69)

Authority: AS 43.05.080; AS 43.19.010 (Art. IV, sec. 18); AS 43.21.020; AS 43.21.090.

15 AAC 21.215. DEDUCTION FOR NATIVE CORPORATION REVENUE SHARING. The amount of income from the production of oil and gas from a lease or property reported as revenue under AS 43.21.020 and 15 AAC 21.110 for the tax year that a taxpayer is required under sec. 7(i) of the Alaska Native Claims Settlement Act to divide among the regional Native corporations is a

deduction in determining the taxpayer's taxable production income for that year. (Eff. 3/26/82, Reg. 81)

Authority: AS 43.05.080; AS 43.19.010 (Art. IV, sec. 18); AS 43.21.020; AS 43.21.090.

15 AAC 21.220. DEDUCTION FOR PRODUCTION TAXES. Taxes imposed under AS 43.55 and AS 43.57 for production from (or allocated to) a lease or property which are paid by, or on behalf of, a taxpayer during a year constitute a deduction in determining the taxpayer's taxable production income for that year. The amount of tax paid under AS 43.55 includes EDIC applied under AS 43.55.018 against that tax. (Eff. 2/22/79, Reg. 69)

Authority: AS 43.05.080; AS 43.19.010 (Art IV, sec. 18); AS 43.21.020; AS 43.21.090.

15 AAC 21.230. DEDUCTION FOR AD VALOREM TAXES. The amount of tax under AS 43.56 paid during a year to the state (net of credits or refunds made that year for municipal ad valorem taxes on the same properties) and the total amount paid that year for municipal ad valorem taxes under AS 29.53.045 — 29.53.055, for a taxpayer's properties used directly in the production, gathering, treatment or preparation for pipeline shipment of oil and gas from a lease or property that is in commercial production before those payments to the state or any municipality are made, constitute a deduction in determining the taxpayer's taxable production income for that year. (Eff. 2/22/79, Reg. 69)

Authority: AS 43.05.080; AS 43.19.010 (Art. IV, sec. 18); AS 43.21.020; AS 43.21.090.

15 AAC 21.235. DEDUCTION FOR CRUDE OIL WINDFALL PROFIT TAX. The amount of tax imposed under sec. 4986 of the Internal Revenue Code for production from (or allocated to) a lease or property which is

paid or incurred by or on behalf of a taxpayer during a year constitutes a deduction in determining the taxpayer's taxable production income for that year. (Eff. 3/26/82, Reg. 81)

Authority: AS 43.05.080; AS 43.19.010 (Art. IV, sec. 18) AS 43.21.020; AS 43.21.090.

15 AAC 21.240. DEDUCTION FOR DIRECT OPERATING COSTS. (a) The direct operating costs during a year that are incurred by or for a taxpayer for a lease or property in the state are a deduction in determining the taxpayer's taxable production income for that year.

(b) Before the commencement of commercial production from (or allocated to) a lease or property, the direct operating costs for that lease or property are (1) the costs for geological and geophysical work conducted on the lease or property after the taxpayer has acquired a working interest in the lease or property, (2) rentals and shut-in royalties paid in order to retain the lease or property, and (3) the costs for operations conducted on or near the lease or property in support of drilling and/or development operations for the lease or property but excluding the actual drilling costs and development costs themselves; however, if the lease or property is subject to an operating agreement in which at least one working-interest owner is a third party to the operator, then the direct operating costs for that lease or property are the costs (excluding drilling costs and development costs) that are incurred by the operator in operating that lease or property and which are reimbursable to the operator by the working-interest owners, under the terms of that operating agreement.

(c) After the commencement of commercial production from (or allocated to) a lease or property, the direct operating costs for that lease or property are the costs of

operating the wells, facilities and equipment on or for the lease or property which directly result in or are necessary for the continued or enhanced production from (or allocated to) the lease or property and the costs of operations conducted on or near the lease or property in support of drilling and/or development operations for the lease or property but excluding the actual drilling costs and development costs themselves; however, if the lease or property is subject to an operating agreement in which at least one working-interest owner is a third party to the operator, then the direct operating costs for that lease or property are the costs (excluding drilling costs and development costs) that are incurred by the operator in operating that lease or property and which are reimbursable to the operator by the working-interest owners, under the terms of that operating agreement.

(d) No cost for the taxpayer's general overhead or administrative expense and no cost that is to be amortized or depreciated under 15 AAC 21.250 and 15 AAC 21.260, respectively, may be included in a deduction under this section. (Eff. 2/22/79, Reg. 69)

Authority: AS 43.05.080; AS 43.19.010 (Art, IV, sec. 18); AS 43.21.020; AS 43.21.090.

15 AAC 21.250. DEDUCTION FOR ACQUISITION COSTS. (a) A taxpayer's acquisition costs for a lease or property in the state that has never had commercial production from (or allocated to) it from any zone are deferred for purposes of this chapter until either there is commercial production from (or allocated to) it or until the lease or property is abandoned without ever having had commercial production from (or allocated to) it.

(b) If a lease or property is abandoned, then the taxpayer's unamortized acquisition costs for that lease or property are a deduction in determining the taxpayer's

taxable production income for the year in which the lease or property is abandoned. If only part of the lease or property is thus abandoned, the unamortized acquisition costs for that lease or property must be apportioned to that abandoned portion on the basis of acreage.

(c) A taxpayer's acquisition costs for a lease or property having commercial production from (or allocated to) it during a year must be amortized, and the amount of amortization that year for those acquisition costs is a deduction in determining the taxpayer's taxable production income for the year. Except for cases when (d) of this section applies, the amount of amortization in a year for a lease or property equals the taxpayer's unamortized acquisition costs as of the beginning of that year, multiplied by the ratio of the Btu-equivalents of the production from (or allocated to) that lease or property during the year, to the total number of the Btu-equivalents represented by the remaining proved reserves (both developed and undeveloped) of that lease or property as of the beginning of the year.

(d) During a year it may happen that a taxpayer transfers part or all of its production interest in a commercially producing lease or property to one or more third parties or receives part of all of a production interest in a lease or property as the result of a transfer from one or more third parties. In such a case, the taxpayer receiving the production interest and the taxpayer transferring the production interest shall each calculate its respective amortization of acquisition costs for that portion of the year preceding the transfer separately from its amortization of acquisition costs for that portion of the year following the transfer; and the sum of each taxpayer's respective amortization of acquisition costs for those two portions of the year will be a deduc-

tion in determining that taxpayer's taxable production income for that year. In calculating amortization for the portion of the year preceding the date of the transfer, the taxpayer shall use the procedure prescribed in (c) of this section, except that the ratio of the Btu-equivalents of production may include only the taxpayer's production from (or allocated to) the lease or property for the portion of the year preceding the date of the production-interest transfer. For that portion of the year following the transfer, the amount of amortization equals the taxpayer's unamortized acquisition costs as of the time immediately following the production-interest transfer, multiplied by the ratio of Btu-equivalents of the taxpayer's production from (or allocated to) the lease or property for the portion of the year on and after the date of the transfer to the total number of Btu-equivalents represented by the taxpayer's remaining proved reserves (both developed and undeveloped) of the lease or property as of the time immediately following the production-interest transfer.

(e) The amount of a taxpayer's unamortized acquisition costs for a lease or property as of a particular date equals the taxpayer's acquisition costs for its original production interest in the lease or property, plus the unamortized acquisition costs for each production interest in the lease or property transferred to the taxpayer on or before that date, and minus the sum of

(1) the unamortized acquisition costs for each production interest in the lease or property transferred from the taxpayer on or before that date;

(2) the cumulative amount (as of that date) of the taxpayer's acquisition costs for the lease or property that has been allowed under this section for amortization or abandonment; and

(3) the taxpayer's standardized prior-tax amortization for the lease or property under 15 AAC 21.630.

(f) A taxpayer amortizing its acquisition costs for a lease or property for financial accounting purposes on a basis other than a variant of unit-of-production amortization may apply to the department for authorization to use that other basis for purposes of calculating the deduction under this section. Upon a satisfactory showing that the taxpayer does use another basis for amortizing its acquisition costs for financial accounting purposes, the department may grant the requested authorization to the taxpayer. Until that authorization is granted in writing, the taxpayer shall follow the method prescribed in this section to amortize its acquisition costs for leases or properties in the state.

(g) The amount of a taxpayer's acquisition costs for a lease or property equals the taxpayer's net payments for

(1) cash bonus or comparable advance payment to acquire the lease or property;

(2) drilling costs for wells bottomed on the lease or property which were completed or abandoned no later than the completion of the discovery well for the field that includes the lease or property and which were spudded after the acquisition of the lease or property or in fulfillment of a condition or requirement to acquire or retain the lease or property;

(3) tax paid under AS 43.56 to the state (net of all credits and refunds for municipal ad valorem taxes on the same property) for property used on or for the lease or property after its acquisition and before the completion of the discovery well for the field that includes the lease or property or for property used in the drilling described in (2) of this subsection, and ad valorem and other taxes

paid to one or more municipalities under AS 29.53 that were incurred for the drilling referred to in (2) of this subsection or for property or operations on or for the lease or property after its acquisition and before the completion of that discovery well;

(4) that portion of the full consideration given by the taxpayer in acquiring a production interest in the lease or property which is properly attributable to the acquisition of the lease or property (as opposed to the wells, facilities and equipment on or in support of the lease or property which directly result in or are necessary for continued or enhanced production from (or allocated to) the lease or property);

(5) interest on capital borrowed from one or more third parties for any of the expenditures described in (1) — (4) of this subsection that was capitalized for purposes of the taxpayer's financial accounting; however, interest so capitalized may be recognized for purposes of this chapter at a rate not to exceed the composite cost of the taxpayer's borrowed capital from third parties as reflected in the taxpayer's financial accounting for the year in which the interest is capitalized.

(h) In the case of a taxpayer which is a regional Native corporation, the amount of the taxpayer's acquisition costs for a lease or property may also include the taxpayer's basis determined for a lease or property under sec. 21(c) of the Alaska Native Claims Settlement Act, as amended, for federal income tax purposes under the Internal Revenue Code of 1954. (Eff. 2/22/79, Reg. 69; am 3/26/82, Reg. 81)

Authority: AS 43.05.080; AS 43.19.010; (Art. IV, sec. 18); AS 43.21.020; AS 43.21.090

15 AAC 21.260. DEDUCTION FOR DEVELOPMENT COSTS. (a) A taxpayer's development costs for a lease or property in the state that has never had commercial production from (or allocated to) it from any zone are deferred for purposes of this chapter until either there is production from (or allocated to) it or until the lease or property is abandoned without ever having had commercial production from (or allocated to) it.

(b) If a lease or property is abandoned without every having had commercial production from (or allocated to) it, then the taxpayer's undepreciated development costs for that lease or property are a deduction in determining that taxpayer's taxable production income for the year in which the lease or property is abandoned.

(c) Except for development costs to which (d) or (e) of this section applies, a taxpayer's development costs for a lease or property having commercial production from (or allocated to) it during a year must be depreciated, and the amount of depreciation that year for those development costs is a deduction in determining the taxpayer's taxable production income for the year. The amount of depreciation in a year for a lease or property equals

(1) the average between the taxpayer's undepreciated development costs for the lease or property as of the beginning of the year and those costs as of the end of the year; multiplied by

(2) the ratio of the Btu-equivalents of the production from (or allocated to) that lease or property during the year, to the total number of the Btu-equivalents represented by the remaining proved developed reserves for that lease or property as of the beginning of that year.

(d) A taxpayer's undepreciated development costs for wells of a lease or property that are abandoned during a

year or for facilities or equipment for the lease or property which are removed during the year are excluded from the development costs that are to be depreciated that year under (c) of this section for that lease or property. Instead, the undepreciated development costs for those wells, facilities or equipment as of the beginning of the year, offset by their salvage value (if any), are a deduction in determining the taxpayer's taxable production income for the year in which they are removed.

(e) During a year it may happen that a taxpayer transfers part or all of its production interest in a commercially producing lease or property to one or more third parties or receives part or all of a producing interest in a lease or property as the result of a transfer from one or more third parties. In such a case, the taxpayer receiving the production interest and the taxpayer transferring the production interest shall each calculate its respective depreciation of development costs for that portion of the year preceding the transfer separately from its depreciation of development costs for that portion of the year following the transfer; and the sum of each taxpayer's respective depreciation of development costs for those two portions of the year will be a deduction in determining that taxpayer's taxable production income for that year. In calculating depreciation for the portion of the year preceding the date of the transfer, the taxpayer shall use the procedure prescribed in (c) of this section, except that the ratio of the Btu-equivalents of production may include only the taxpayer's production from (or allocated to) the lease or property for the portion of the year preceding the date of the production-interest transfer. For that portion of the year following the transfer, the amount of depreciation equals the average of the taxpayer's undepreciated development costs as of the time immediately following the production-interest

transfer and as of the end of the year, multiplied by the ratio of Btu-equivalents of the taxpayer's production from (or allocated to) the lease or property for the portion of the year on and after the date of the transfer to the total number of Btu-equivalents represented by the taxpayer's remaining proved developed reserves of the lease or property as of the time immediately following the production-interest transfer.

(f) The amount of a taxpayer's undepreciated development costs for a lease or property as of a particular date equals the taxpayer's development costs as of that date for the wells, facilities and equipment for that lease or property that are then in place, minus the sum of

(1) the cumulative amount (as of that date) allowed under this chapter for depreciation of the taxpayer's development costs for the lease or property; and

(2) the taxpayer's standardized prior-tax depreciation for the lease or property under 15 AAC 21.630.

(g) A taxpayer depreciating its development costs for a lease or property for financial accounting purposes on a basis other than a variant of unit-of-production depreciation may apply to the department for authorization to use that other basis for purposes of calculating the deduction under this section. Upon a satisfactory showing that the taxpayer does use another basis for depreciating its development costs for financial accounting purposes, the department may grant the requested authorization to the taxpayer. Until that authorization is granted in writing, the taxpayer shall follow the method prescribed in this section to depreciate its development costs for leases or properties in the state for purposes of this chapter.

(h) The amount of a taxpayer's development costs for a lease or property equals the taxpayer's net payments for

(1) drilling costs for wells drilled on or for the lease or property which were completed or abandoned after the completion of the discovery well for the field that includes the lease or property;

(2) development costs for facilities and equipment on or in support of the lease or property that directly result in or are necessary for continued or enhanced production from (or allocated to) the lease or property;

(3) tax paid under AS 43.56 to the state (net of all credits and refunds for municipal ad valorem taxes on the same property) for property used in the drilling described in (1) of this subsection or described in (2) of this subsection, and ad valorem and other taxes paid to one or more municipalities under AS 29.53 that were incurred directly as the result of, and in the course of, the drilling described in (1) of this subsection and/or the installation or operation of the property described in (2) of this subsection;

(4) that portion of the full consideration given by the taxpayer in acquiring a production interest in the lease or property, which is properly attributable to the wells, facilities and equipment on or in support of the lease or property which directly result in or are necessary for continued or enhanced production from (or allocated to) the lease or property (as opposed to the consideration given for the lease or property itself);

(5) interest on capital borrowed from one or more third parties for any of the expenditures described in (1) — (4) of this subsection that was capitalized for purposes of the taxpayer's financial accounting; however, interest so capitalized may be recognized for purposes of this chapter at a rate not to exceed the composite cost of the taxpayer's borrowed capital from third parties as reflected in the taxpayer's financial accounting for the year

in which the interest is capitalized. (Eff. 2/22/79, Reg. 69)

Authority: AS 43.05.080; AS 43.19.010; (Art. IV, sec. 18); AS 43.21.020; AS 43.21.090

15 AAC 21.270. DEDUCTION FOR EXPLORATION COSTS. (a) A taxpayer's cost (excluding all general overhead and administrative expense allocated to the exploration) for oil and gas exploration on land in the state before the taxpayer has any production interest in that land constitute a deduction in determining the taxpayer's taxable production income for the earlier of (1) the year in which the permit or other authorization to enter that land to conduct that exploration expires without the taxpayer's having by then acquired a production interest in that land or (2) the year the taxpayer acquires a production interest in that land; except that the drilling costs for a well drilled in the course of that exploration may be deducted in determining the taxpayer's taxable production income for only that year in which the well is completed or abandoned.

(b) A taxpayer's exploration costs incurred in a project involving land both within and outside the state and in which the taxpayer then has no production interest should be allocated on the basis of relative acreage involved in the project. The department may authorize or require such an allocation to be on another basis if that is more appropriate than using acreage. (Eff. 2/22/79, Reg. 69)

Authority: AS 43.05.080; AS 43.19.010; (Art. IV, sec. 18); AS 43.21.020; AS 43.21.090

15 AAC 21.280. DEDUCTION FOR UNCAPITALIZED INTEREST. (a) Subject to the limitations in (b) of this section, a deduction is allowed in determining a taxpayer's taxable production income during a year for

interest paid or incurred to third parties by the taxpayer that year, in connection with oil and gas production in Alaska, which was not capitalized by the taxpayer for financial accounting purposes.

(b) Unless a corporation demonstrates to the satisfaction of the department that it paid or incurred greater actual expenses for interest attributable to deriving income from oil or gas production in the state, the deduction under (a) of this section for interest by a taxpayer for any year may not exceed an amount equal to the total interest paid worldwide that year by the consolidated business of which the taxpayer is a part, multiplied by a fraction whose numerator equals the net book value (as of the end of that year) for financial accounting purposes of the taxpayer's real and tangible personal property of the type described in 15 AAC 21.250 and 15 AAC 21.260 (excluding the estimated value of the taxpayer's remaining oil and gas reserves), and whose denominator is the net book value (as of the end of that year) for financial accounting purposes of all real and tangible personal property (excluding the estimated value of remaining oil and gas reserves) worldwide of the consolidated business of which the taxpayer is a part. In this subsection, "total interest paid by the consolidated business" includes only interest paid to third parties plus the pass-through of interest on third-party borrowings by any member of the consolidated business for the expressed purpose of financing the Alaska business activity of the taxpayer. (Eff. 2/22/79, Reg. 69; am 3/26/82, Reg. 81)

Authority: AS 43.05.080; AS 43.19.010; (Art. IV, sec. 18); AS 43.21.020; AS 43.21.090

15 AAC 21.290. DEDUCTION FOR GENERAL OVERHEAD AND ADMINISTRATIVE EXPENSE. (a) Subject to the limitation in (b) of this section, a

deduction is allowed in determining a taxpayer's taxable production income during a year, for the taxpayer's general overhead and administrative expense during that year which is properly allocated (on the basis of personnel time sheets, office space or another basis having general currency in the oil and gas industry) to (1) operations for leases or properties in the state, (2) acquiring leases or properties in the state, or (3) exploration in the state. Where general overhead and administrative expense is properly allocated to an activity described in the preceding sentence that is conducted both within and outside the state, that general overhead and administrative expense must be allocated to in-state activity on the basis of the relative acreage involved in that activity which is in the state; however, the department will, in its discretion, authorize or require another basis for this allocation if that other basis is more appropriate than acreage.

(b) Unless a corporation demonstrates to the satisfaction of the department that it paid or incurred greater actual expenses for general overhead and administrative costs (including a reasonable amount of profit, if any, that is actually allocated to general overhead and administrative activities for purposes of reporting that year's earnings and profits to the stockholders) attributable to deriving income from oil or gas production in the state, the deduction under (a) of this section for a taxpayer's general overhead and administrative expense for any year may not exceed an amount equal to the general overhead and administrative expense worldwide (including a reasonable amount of profit, if any, that is actually allocated to general overhead and administrative activities for purposes of reporting that year's earnings and profits to stockholders) during that year for the consolidated business of which the taxpayer is a part, multiplied by a

fraction of whose numerator equals the net book value (as of the end of that year) for financial accounting purposes of the taxpayer's real and tangible personal property of the type described in 15 AAC 21.250 and 15 AAC 21.260 (excluding the estimated value of the taxpayer's remaining oil and gas reserves), and whose denominator is the net book value (as of the end of that year) for financial accounting purposes of all real and tangible personal property (excluding the estimated value of remaining oil and gas reserves) worldwide of the consolidated business of which the taxpayer is a part. (Eff. 2/22/79, Reg. 69; am 3/26/82, Reg. 81)

Authority: AS 43.05.080; AS 43.19.010; (Art. IV, sec. 18); AS 43.21.020; AS 43.21.090

ARTICLE 3.

TAXABLE INCOME FROM OIL AND GAS PIPELINES

Section

300. Taxable oil pipeline income

310. Operating revenues (oil pipelines)

320. Extraordinary operating revenues and losses (oil pipelines)

330. (Reserved)

340. (Reserved)

350. Operating expenses (oil pipelines)

360. (Reserved)

370. (Reserved)

380. (Reserved)

390. (Reserved)

400. Taxable gas pipeline income

410. Operating revenues (gas pipelines)

420. Extraordinary operating revenues and losses (gas pipelines)

430. (Reserved)

440. (Reserved)

450. Operating expenses (gas pipelines)
460. (Reserved)
470. (Reserved)
480. (Reserved)
490. (Reserved)

15 AAC 21.300. TAXABLE OIL PIPELINE INCOME. Taxable oil pipeline income during a year from an oil pipeline operating wholly or partially in the state equals that year's operating revenues (determined under 15 AAC 21.310) for that pipeline, minus that year's operating expenses (determined under 15 AAC 21.350) for that pipeline, and plus or minus that year's extraordinary operating revenues or losses (determined under 15 AAC 21.320), respectively, for that pipeline. A taxpayer's taxable oil-pipeline income during a year for purposes of this chapter equals the sum of the taxpayer's share (if any) of that year's taxable oil-pipeline income derived from in-state operations for each oil pipeline operating wholly or partially in the state. (Eff. 2/22/79, Reg. 69)

Authority: AS 43.05.080; AS 43.19.010; (Art. IV, sec. 18); AS 43.21.030; AS 43.21.090

15 AAC 21.310. OPERATING REVENUES (OIL PIPELINES). (a) The operating revenues during a year for an oil pipeline are equal to the sum of the gathering revenues for that pipeline during that year, the trunk revenues for that pipeline during that year, the delivery revenues for that pipeline during that year, the allowance oil revenue for that pipeline during that year, the storage and demurrage revenue for that pipeline during that year, the rental revenue for that pipeline during that year and the incidental revenue for that pipeline during that year.

(b) For purposes of this chapter, "gathering revenues," "trunk revenues," "delivery revenues," "allowance oil revenue," "storage and demurrage revenue," "rental

revenue" and "incidental revenue" mean the same as the accounts of the same names (accounts 200, 210, 220, 230, 240, 250 and 260, respectively) in FERC's Uniform System of Accounts for oil pipelines; and the amount of each must be determined in the same manner as its counterpart in that Uniform System of Accounts. (Eff. 2/22/79, Reg. 69)

Authority: AS 43.05.080; AS 43.19.010; (Art. IV, sec. 18); AS 43.21.030; AS 43.21.090

15 AAC 21.320. EXTRAORDINARY OPERATING REVENUES AND LOSSES (OIL PIPELINES). (a) A retroactive increase or decrease in the tariff(s) legally allowed to be charged by an oil pipeline results in extraordinary operating revenues or extraordinary operating losses, respectively, for that pipeline, which are fully recognized for purposes of this chapter at the time the retroactive tariff change takes effect. The amount of the extraordinary operating revenues or extraordinary operating losses equals the difference between the operating revenues actually received under the tariff(s) previously charged and the operating revenues that would have been received under the tariff(s) as retroactively changed, during the period to which the change applies.

(b) A catastrophic loss of oil being transported by a pipeline, for which that pipeline is liable, may result in extraordinary operating losses for that pipeline. The amount of those extraordinary operating losses equals the pipeline's costs, unreimbursed by insurance or from one or more third parties and not included in account 570 of FERC's Uniform System of Accounts for oil pipelines, for damage to pipeline property, for repayment to shippers for lost oil, and for damage or cleanup of spilled oil. These extraordinary operating losses are fully recognized for purposes of this chapter in the year when the oil is lost.

The costs of permanently terminating operations or removing part or all of the facilities and equipment of a pipeline result in extraordinary operating losses for that pipeline. The amount of these extraordinary operating losses which may be taken in any one taxable year is the unreimbursed termination and removal costs for the pipeline that are actually incurred that year, offset by the salvage value, if any, if the removed facilities and equipment and offset to the extent of any amounts allowed to be deducted before termination and removal under 15 AAC 21.350(a) by the taxpayer.

(d) If under (c) of this section or 15 AAC 21.350(a), unreimbursed, estimated termination and removal costs for a pipeline are not actually expended or the deduction of those amounts is disallowed by FERC or other authority having jurisdiction, then the amount allowed or allowable as a deduction must be recaptured as extraordinary operating revenue. (Eff. 2/22/79, Reg. 69; am 5/21/81, Reg. 78)

Authority: AS 43.05.080; AS 43.19.010; (Art. IV, sec. 18); AS 43.21.020

15 AAC 21.330 — 15 AAC 21.340. (Reserved)

15 AAC 21.350. OPERATING EXPENSES (OIL PIPELINES). (a) The operating expenses during a year for an oil pipeline include that year's amounts for the pipeline that are properly included in the following ac-

counts under FERC's Uniform System of Accounts for oil pipelines:

Operations

300 Salaries and wages
310 Supplies and expenses
320 Outside services
330 Operating fuel and power
340 Oil losses and shortages

Maintenance

400 Salaries and wages
410 Supplies and expenses
420 Outside services
430 Maintenance materials

General

500 Salaries and wages
510 Supplies and expenses
520 Outside services
530 Rentals
540 Depreciation and amortization
550 Pensions and benefits
560 Insurance
570 Casualty and other losses

(b) In addition to the amounts included in the accounts listed in (a) of this section, the operating expenses during a year for an oil pipeline also include

(1) accruals to third parties during that year, by any member of the consolidated business of which the taxpayer is a part, for uncapitalized interest on capital borrowed to acquire, construct, or enlarge the facilities of the pipeline; and

(2) accruals during that year for taxes of all kinds, excepting federal income taxes and the taxes administered under this chapter, relating to the carrier property,

operations, privileges, and licenses of that pipeline. (Eff. 2/22/79, Reg. 69; am 8/27/85, Reg. 95)

Authority: AS 43.05.080; AS 43.19.010; (Art. IV, sec. 18); AS 43.21.030; AS 43.21.090

15 AAC 21.360 — 15 AAC 21.390. (Reserved)

15 AAC 21.400. TAXABLE GAS PIPELINE INCOME. Taxable gas pipeline income during a year from a gas pipeline operating wholly or partially in the state equals that year's operating revenues (determined under 15 AAC 21.410) for that pipeline, minus that year's operating expenses (determined under 15 AAC 21.450) for that pipeline, and plus or minus that year's extraordinary operating revenues or losses (determined under 15 AAC 21.420) respectively, for that pipeline. A taxpayer's taxable gas-pipeline income during a year for purposes of this chapter equals the sum of the taxpayer's share (if any) of that year's taxable gas-pipeline income derived from in-state operations for each gas pipeline operating wholly or partially in the state. (Eff. 2/22/79, Reg. 69)

Authority: AS 43.05.080; AS 43.19.010; (Art. IV, sec. 18); AS 43.21.030; AS 43.21.090

15 AAC 21.410. OPERATING REVENUES (GAS PIPELINES). (a) For a gas pipeline not subject to (c) of this section that is (or is part of) a Class A or B natural gas company, its operating revenues during a year equal the gross proceeds from all gas delivered or sold that year by that gas pipeline, minus the sum of

(1) for gas that the pipeline acquired from one or more third parties, the total of the amounts properly included for that year in accounts 800 (Natural Gas Well Head Purchases), 801 (Natural Gas Field Line Purchases), 802 (Natural Gas Gasoline Plant Outlet Purchases), 803 (Natural Gas Transmission Line Purchases) and 805

(Other Gas Purchases) of FERC's Uniform System of Accounts for Class A and B natural gas companies; and

(2) for gas that the pipeline did not acquire from one or more third parties, the value at the point of production under 15 AAC 21.120 for all such gas produced that year and transported by the gas pipeline.

(b) For a gas pipeline not subject to (c) of this section that is (or is part of) a Class C or D natural gas company, its operating revenues during a year equal the gross proceeds from all gas delivered or sold that year by that gas pipeline, minus the sum of

(1) for gas that the pipeline acquired from one or more third parties, the total of the amounts properly included for that year in accounts 730 (Natural Gas Purchases) and 731 (Other Gas Purchases) of FERC's Uniform System of Accounts for Class C and D natural gas companies; and

(2) for gas that the pipeline did not acquire from one or more third parties, the value at the point of production under 15 AAC 21.120 for all such gas produced that year and transported by the gas pipeline.

(c) For a gas pipeline that is regulated on a consolidated basis with a retail sales and distribution system in this state, its operating revenues for a year equal the amount, reported to the regulatory agency having jurisdiction, which is properly included for that year in account 400 (Operating Revenue) and allocated to that gas pipeline (account 400 refers to the account of that number in both FERC's Uniform System of Accounts for Class A and B natural gas companies and the one for Class C and D natural gas companies). Eff. 2/22/79, Reg. 69)

Authority: AS 43.05.080; AS 43.19.010; (Art. IV, sec. 18); AS 43.21.030; AS 43.21.090

15 AAC 21.420 EXTRAORDINARY OPERATING REVENUES AND LOSSES (GAS PIPELINES). (a) A retroactive change in the prices or cost of service allowed for a gas pipeline or extraordinary operating losses for that pipeline, may result in extraordinary operating revenues or extraordinary operating losses for that pipeline, which are fully recognized for purposes of this chapter at the time the retroactive change takes effect. The amount of extraordinary operating revenue or extraordinary operating loss in such a case equals the increase or decrease, respectively, in operating revenues under the retroactive change from its operating revenues under the previous prices and cost of service, for the period to which the change applies.

(b) A catastrophic loss of gas being transported by a pipeline, for which that pipeline is liable, may result in extraordinary operating losses for that pipeline. The amount of those extraordinary operating losses equals the pipeline's costs, unreimbursed by insurance or from one or more third parties and not included in the pipeline's operating expenses under 15 AAC 21.450, for damage to pipeline property, for the lost gas and for other damage or cleanup resulting from the loss of the gas. These extraordinary operating losses are fully recognized for purposes of this chapter in the year when the loss occurs.

(c) The amount authorized or required by FERC to be included in account 182 (Extraordinary Property Losses) for a gas pipeline is an extraordinary operating loss for that pipeline, fully recognized for purposes of this chapter in the year in which it is incurred (account 182 refers to the account of that number in both FERC's Uniform System of Accounts for Class A and B natural

gas companies and the one for Class and C and D natural gas companies).(Eff. 2/22/79, Reg. 69)

Authority: AS 43.05.080; AS 43.19.010; (Art. IV, sec. 18); AS 43.21.030; AS 43.21.090

15 AAC 21.430 — 15 AAC 21.440. Reserved.

15 AAC 21.450. OPERATING EXPENSES (GAS PIPELINES). (a) For a gas pipeline not subject to (c) of this section that is or is part of a Class A or B natural gas company, its operating expenses during a year include that year's amounts for the pipeline that are properly included in those accounts under FERC's Uniform System of Accounts for Class A and B natural gas companies which, when deducted from operating revenues under 15 AAC 21.410, yield net carrier operating income.

(b) For a gas pipeline not subject to (c) of this section that is or is part of a Class C or D natural gas company, its operating expenses during a year include that year's amounts properly allocated to the pipeline and included in the following accounts under FERC's Uniform System of Accounts for Class C and D natural gas companies:

750 Operation supervision and labor
751 Compressor station fuel and power
752 Operation supplies and equipment
753 Transmission and compression of gas by others
754 Rents
755 Maintenance of mains
756 Maintenance of compressor station equipment
757 Maintenance of other plant

(c) For a gas pipeline that is regulated on a consolidated basis with a retail sales and distribution system in this state, a year's operating expenses for the pipeline equal the total of the amounts, reported to the regulatory

agency having jurisdiction, which are properly allocated to that pipeline and included in accounts 401 (Operation Expense), 402 (Maintenance Expense), 403 (Depreciation Expense), 404.2 (Amortization of Underground Storage Land and Land Rights), 404.3 (Amortization of Other Limited Term Gas Plant), 405 (Amortization of Other Gas Plant), 406 (Amortization of Gas Plant Acquisition Adjustments), 407.2 (Amortization of Conversion Expenses), 408.1 (Taxes other than Income Taxes, Utility Operating Income) and 427 (Interest on Longterm Debt) for that year (the accounts referred to are the same as those of the same number in FERC's Uniform System of Accounts for Class A and B natural gas companies).

(d) For a gas pipeline subject to (a) or (b) of this section, its operating expenses for a year include, in addition to (but only to the extent not already reflected in) the amounts included in specified FERC accounts applicable to that pipeline

(1) accruals to third parties during that year for uncapitalized interest on capital borrowed to construct or enlarge the facilities of the pipeline; and

(2) accruals during that year for taxes of all kinds, excepting federal income taxes and the taxes administered under this chapter, relating to the carrier property, operations, privileges and licenses of that pipeline. (Eff. 2/22/79, Reg. 69; am 5/21/81, Reg. 78)

Authority: AS 43.05.080; AS 43.19.010 (Art. IV, sec. 18); AS 43.21.030; AS 43.21.090.

15 AAC 21.460 — 15 AAC 21.490. Reserved.

ARTICLE 4.
TAXABLE INCOME APPORTIONED TO ALASKA

Section
500. Taxable apportioned income
510. Apportionable income
520. Three-factor formula for apportionment
530. Property factor
540. Payroll factor
550. Sales factor
560. (Reserved)
570. (Reserved)
580. (Reserved)
590. (Reserved)

15 AAC 21.500. TAXABLE APPORTIONED INCOME. A taxpayer's taxable apportioned income for a year from activities in the state other than the production of oil and gas and the pipeline transportation of oil and gas equals that taxpayer's apportionable income (determined under 15 AAC 21.510) for that year, multiplied by the three-factor formula (under 15 AAC 21.520 - 15 AAC 21.550) for that year. (Eff. 2/22/79, Reg. 69)

Authority: AS 43.05.080; AS 43.19.010 (Art. IV, sec. 18); AS 43.21.040; AS 43.21.090.

15 AAC 21.510. APPORTIONABLE INCOME. A taxpayer's apportionable income for a year equals

(1) the sum of

(A) for a member of the consolidated business of which the taxpayer is a part which is required to file under the United States Internal Revenue Code, that member's taxable income under Chapter 1 of Subtitle A of the Internal Revenue Code of 1954;

(B) for a member of the consolidated business of which the taxpayer is a part which is not required to file under the United States Internal Revenue Code, that member's book income reported to shareholders or its income as it would be determined under (1)(A) of this section; and

(C) any taxes based on or measured by net income that are deducted to determine income in (1)(A) and (1)(B) of this section;

(2) minus the sum of

(A) any dividends received from members of the consolidated business of which the taxpayer is a part that are taxable under the United States Internal Revenue Code and foreign intercompany dividends;

(B) any income included in (1)(A) and (1)(B) of this section attributable to the worldwide production and pipeline transportation of oil and gas; and

(C) any taxes based on or measured by net income that are deducted to determine the income included in (2)(B) of this section attributable to the worldwide production and pipeline transportation of oil and gas. (Eff. 2/22/79, Reg. 69; am 5/21/81, Reg. 78; am 3/26/82, Reg. 81)

Authority: AS 43.05.080; AS 43.19.010 (Art. IV, sec. 18); AS 43.21.040; AS 43.21.090.

15 AAC 21.520. THREE-FACTOR FORMULA FOR APPORTIONMENT. The three-factor formula to be used in determining a taxpayer's taxable apportioned income for a year under 15 AAC 21.500 is a fraction. The numerator of that fraction is the sum of (1) that year's property factor under 15 AAC 21.530 for the taxpayer, (2) that year's payroll factor under 15 AAC 21.540 for the

taxpayer, and (3) that year's sales factor under 15 AAC 21.550 for the taxpayer. The denominator of that fraction is the number three. (Eff. 2/22/79, Reg. 69)

Authority: AS 43.05.080; AS 43.19.010 (Art. IV, sec. 18); AS 43.21.040; AS 43.21.090.

15 AAC 21.530. PROPERTY FACTOR. A taxpayer's property factor for a year equals the property factor that year for the consolidated business of which the taxpayer is a part, as determined under the applicable methods of AS 43.19.010 (Art. IV, sec. 10 - 12), AS 43.20.071(b) and (e), and 15 AAC 19.141 - 15 AAC 19.202; except that the numerator and denominator of the property factor must each be determined without reference to

(1) leases or properties, other real property and tangible personal property in the state that is owned or leased by the taxpayer and is used directly in, or is necessary for the continuation or enhancement of, exploration for oil and gas, production of oil and gas, or transportation of oil and gas by pipeline; and

(2) vessels transporting Alaskan oil or gas of the consolidated business which are not owned or effectively owned by the consolidated business. (Eff. 2/22/79, Reg. 69; am 5/21/81, Reg. 78; am 3/26/82, Reg. 81)

Authority: AS 43.05.080; AS 43.19.010 (Art. IV, sec. 18); AS 43.21.040; AS 43.21.090.

15 AAC 21.540. PAYROLL FACTOR. A taxpayer's payroll factor for a year equals the payroll factor that year for the consolidated business of which the taxpayer is a part, as determined under the applicable methods of AS 43.19.010 (Art. IV, secs. 13 and 14), AS 43.20.071(c) and (e), and 15 AAC 19.211 - 15 AAC 19.241; except that the numerator and denominator of the payroll factor must each be determined without reference to

(1) compensation earned by the taxpayer's employees working directly in operations on or for a lease or property in the state which directly result in or are necessary for the continued or enhanced production of oil or gas from (or allocated to) the lease or property; and

(2) compensation earned by the taxpayer's employees working directly in the in-state operations of an oil pipeline or a gas pipeline. (Eff. 2/22/79, Reg. 69; am 3/26/82, Reg. 81)

Authority: AS 43.05.080; AS 43.19.010 (Art. IV, sec. 18); AS 43.21.040; AS 43.21.090.

15 AAC 21.550. SALES FACTOR. A taxpayer's sales factor for a year equals the sales factor that year for the consolidated business of which the taxpayer is a part, as determined under the applicable methods of AS 43.19.010 (Art. IV. secs. 15 - 17), AS 43.20.071(d) and (e), and 15 AAC 19.251 - 15 AAC 19.302; except that the numerator and denominator of the sales factor must each exclude nonretail sales of oil or gas produced from (or allocated to) one or more leases or properties in the state, but only to the extent that those sales would otherwise be included in the numerator and denominator of the sales factor. (Eff. 2/22/79, Reg. 69)

Authority: AS 43.05.080; AS 43.19.010; (Art. IV, sec. 18); AS 43.21.040; AS 43.21.090.

15 AAC 21.560 — 15 AAC 21.590. Reserved.

ARTICLE 5.
TRANSITION RULES

Section

600. General rule

610. Notice of commencement of taxable activity

620. Partial years

630. Expenses and net operating losses under the old tax

640. Installments under the old tax

650. Net operating cost carryovers from AS 43.20

660. Net operating loss carrybacks from AS 43.20

670. (Reserved)

680. (Reserved)

690. (Reserved)

15 AAC 21.600. GENERAL RULE. Income of a taxpayer that was taxed under AS 43.20 and 15 AAC 20 will not be taxed again under this chapter as the result of that taxpayer's becoming subject to tax under AS 43.21 and this chapter. Similarly, expenses of a taxpayer that were deducted under AS 43.20 and 15 AAC 20 will not be deducted again under this chapter as a result of that taxpayer's becoming subject to tax under AS 43.21 and this chapter. The department will work on a case-by-case basis with taxpayers that become subject to tax under AS 43.21 and this chapter, to ensure that neither income nor expense of any taxpayer that was already treated under AS 43.20 and 15 AAC 20 is included again in that taxpayer's treatment under AS 43.21 and this chapter. (Eff. 2/22/79, Reg. 69)

Authority: AS 43.05.080; AS 43.21.080; AS 43.21.090.

15 AAC 21.610. NOTICE OF COMMENCEMENT OF TAXABLE ACTIVITY. A corporation not subject to tax under AS 43.21 and this chapter shall, within 30 days of the time it begins to derive income (even if that income is exceeded by the expenses involved) from any of the sources described in 15 AAC 21.010, give written notice to the department of the fact that it has begun deriving income from those sources. This section applies only to those who, after the effective date of AS 43.21 and the original adoption date of this section, begin deriving income from any source described in 15 AAC 21.010. (Eff. 2/22/79, Reg. 69)

Authority: AS 43.05.080; AS 43.21.080; AS 43.21.090.

15 AAC 21.620. PARTIAL YEARS. A fiscal-year taxpayer authorized under 15 AAC 21.810 to report and pay taxes on a fiscal-year basis and doing so for the first time shall notify the department in writing which of the following bases it elects to use in dividing its income and expenses during that first fiscal year between the portion of the fiscal year that ends with the calendar year ending during that fiscal year and the remaining portion of that fiscal year:

(1) pro-rationing on the basis of the number of days in the two portions of the fiscal year;

(2) division on the basis of the date each item of income or expense is considered incurred for purposes of the taxpayer's financial accounting. (Eff. 2/22/79, Reg. 69)

Authority: AS 43.05.080; AS 43.21.080; AS 43.21.090.

15 AAC 21.630. EXPENSES AND NET OPERATING LOSSES UNDER THE OLD TAX. (a) To avoid double deductions with respect to a taxpayer's acquisition costs and development costs for a lease or property that

were incurred before the taxpayer became subject to tax under AS 43.21 and this chapter, and to insure equitable treatment among taxpayers,

(1) the taxpayer's unamortized acquisition costs for the lease or property must be reduced by the taxpayer's standardized prior-tax amortization for that lease or property, as provided in 15 AAC 21.250(e); and

(2) the taxpayer's undepreciated development costs for the lease or property must be reduced by the taxpayer's standardized prior-tax depreciation for that lease or property, as provided in 15 AAC 21.260(f).

(b) For purposes of this chapter, a taxpayer's "standardized prior-tax amortization" means the amount, presumed to have been already deducted under AS 43.20 and 15 AAC 20, which equals the lesser of

(1) an amount equal to AC

$$AC \times \frac{P}{P + R},$$

where AC equals the taxpayer's total acquisition costs for the lease or property as of the new-tax commencement date for that taxpayer, P equals the Btu-equivalents of the production from (or allocated to) the lease or property before that new-tax commencement date, and R equals the Btu-equivalents represented by the remaining proved reserves (both developed and undeveloped) of the lease or property as of that new-tax commencement date; and

(2) the amount of the taxpayer's acquisition costs for the lease or property which the taxpayer demonstrates, to the department's satisfaction, as having been actually deducted on the taxpayer's reports filed under AS 43.20 and 15 AAC 20.

(c) For purposes of this chapter, a taxpayer's "standardized prior-tax depreciation" means the amount, presumed to have been deducted under AS 43.20 and 15 AAC 20, which equals the lesser of

(1) an amount equal to DC

$$DC \times \frac{P}{P + DR},$$

where DC equals the taxpayer's total development costs for the lease or property as of the new-tax commencement date for that taxpayer, P equals the Btu-equivalents of the production from (or allocated to) the lease or property before that new-tax commencement date, and DR equals the Btu-equivalents represented by the remaining proved developed reserves of the lease or property as of that new-tax commencement date; and

(2) the amount of the taxpayer's development costs for the lease or property which the taxpayer demonstrates, to the department's satisfaction, as having been actually deducted on the taxpayer's reports filed under AS 43.20 adn 15 AAC 20.

(d) Repealed 3/26/82.

(e) For purposes of this chapter, the "new-tax commencement date" for a particular taxpayer is January 1, 1978 or, if the taxpayer had not begun deriving income from a source specified in 15 AAC 21,010 before January 1, 1978, the date when the taxpayer does begin deriving income from such a source. (Eff. 2/22/79, Reg. 69; am 3/26/82, Reg. 81)

Authority: AS 43.05.080; AS 43.21.080; AS 43.21.090

15 AAC 21.640. INSTALLMENTS UNDER THE OLD TAX. Installment payments of a taxpayer's estimated tax under AS 43.20 and 15 AAC 20 during the tax

year in which it becomes subject to tax under AS 43.21 and this chapter, will be treated as installments made under 15 AAC 21.710 for that tax year. The taxpayer shall make any additional payments that may come due under 15 AAC 21.710 for the remainder of that tax year after the taxpayer has become subject to tax under AS 43.21 and this chapter. (Eff. 2/22/79, Reg. 69)

Authority: AS 43.05.080; AS 43.21.080; AS 43.21.090

15 AAC 21.650. NET OPERATING LOSS CARRYOVERS FROM AS 43.20. (a) Net operating loss deductions arising from losses incurred under AS 43.20 before the taxpayer's becoming subject to tax under AS 43.21 may be carried forward and applied against income reported under AS 43.21.040 and 15 AAC 21.500 - 15 AAC 21.550. For multistate taxpayers, the amount of the carryforward is calculated by applying the apportionment factor in the year of the loss to the amount of the loss determined for AS 43.20 purposes. The carryforward for any year may not exceed the income reported, or as subsequently determined by the department, under AS 43.21.040 and 15 AAC 21.500 - 15 AAC 21.550. Any unused loss may be carried forward to the next succeeding year and applied in accordance with these rules. Unused losses not applied to income under AS 43.21.040 may be carried forward and applied to income reported under AS 43.20 for a period of 15 years following the year of the loss.

(b) Net operating loss deductions under this section must be applied against income reported under AS 43.21.040 and 15 AAC 21.500 - 15 AAC 21.550 before any net operating loss carrybacks under 15 AAC 21.660 are applied to that income. (Eff. 3/26/82, Reg. 81)

Authority: AS 43.05.080; AS 43.21.080; AS 43.21.090

15 AAC 21.660. NET OPERATING LOSS CARRYBACKS FROM AS 43.20. Net operating loss deductions arising from losses incurred under AS 43.20 for tax years commencing after December 31, 1981, may be carried back for a period of three years and applied against income reported under AS 43.21.040 and 15 AAC 21.500 - 15 AAC 21.550. For multistate taxpayers, the amount of the carryback is calculated by applying the apportionment factor in the year of the loss to the amount of the loss determined for AS 43.20 purposes. The carryback for any year may not exceed the income reported, or as subsequently determined by the department, under AS 43.21.040 and 15 AAC 21.500 - 15 AAC 21.550. The carryback must first be applied to the third tax year preceding the year of the loss. Any unused loss may be carried forward to the next succeeding year and applied in accordance with this section. Unused losses not applied to income under AS 43.21.040 may be carried forward and applied to income reported under AS 43.20 for a period of 15 years following the year of the loss. (Eff. 3/26/82, Reg. 81)

Authority: AS 43.05.080; AS 43.19.010 (Art. IV, sec. 18); AS 43.21.040; AS 43.21.080; AS 43.21.090

15 AAC 21.670 - 15 AAC 21.690. Reserved.

ARTICLE 6.

ADMINISTRATION

Section

700. Returns and assessments
710. Payments; installments
720. Refunds
730. Computation of interest
740. Civil penalties

750. Relief
800. Application to the 1978 tax year
810. Statute of limitations
820. Fiscal-year taxpayers
830. (Reserved)
840. (Reserved)
850. (Reserved)
860. (Reserved)
870. (Reserved)
880. (Reserved)
890. (Reserved)

15 AAC 21.700 RETURNS AND ASSESSMENTS. (a) A taxpayer reporting on a calendar-year basis shall file, on or before April 15 of each year, a tax return on such forms as may be prescribed by the department, setting out all the information required in determining that taxpayer's net taxable income under this chapter for the previous year and the amount of tax due on that income.

(b) A fiscal-year taxpayer shall file, on or before the 15th day of the fourth month after the month in which the taxpayer's fiscal year ends, a tax return on such forms as may be prescribed by the department, setting out all the information required in determining that taxpayer's net taxable income under this chapter for the taxpayer's fiscal year last ended and the amount of tax due on that income.

(c) In its discretion, the department will grant a taxpayer an extension of as many as 60 days from the deadlines for filing returns specified in (a) and (b) of this section. An application for an extension must be on a form prescribed by the department, setting forth all the information required to support the application.

(d) Returns required under this section must be filed by the corporation deriving income (or to which income is attributed under 15 AAC 21.040) from one or more of the

sources described in 15 AAC 21.010. Where two or more such corporations are parts of the same consolidated business, they shall file a single consolidated return.

(e) On or before August 15 (for fiscal-year taxpayers, the 15th day of the eighth month after the month in which the taxpayer's fiscal year ends), the department will assess the taxpayer and send the taxpayer a notice of assessment showing the amount of net taxable income under this chapter for that taxpayer during the previous year, the total amount of tax due under this chapter, and the amount (if any) of that tax remaining unpaid or overpaid. Returns and assessments under this section are subject to amendment for three years from the date of the original notice of assessment.

(f) The taxpayer shall notify the department in writing of any amendments to forms, reports, or other materials required to be submitted to the department as a part of a return within 60 days after the amendment is made. The reasons for and facts supporting the amendments must be described in detail. The applicable statute of limitation periods set out in AS 43.05.260 and 15 AAC 21.700(e) run from the time the department is notified by the taxpayer of the amendment. (Eff. 2/22/79, Reg. 69; am 5/21/81, Reg. 78)

Authority: AS 43.05.080; AS 43.21.030; AS 43.21.050; AS 43.21.090

15 AAC 21.710. PAYMENTS; INSTALLMENTS. (a) For the 1978 tax year, each taxpayer shall prepay its estimated tax under this chapter in an installment on or before March 15, 1979, which, when combined with the taxpayer's installment payments (if any) of estimated tax under AS 43.20 and 15 AAC 20 made after December 31, 1977, brings the total prepaid tax to 100 percent of the tax and surtax on the taxpayer's total estimated 1978 net

taxable income under this chapter, as that net taxable income is estimated and reported by the taxpayer at the time it makes the installment.

(b) For tax years after the 1978 tax year, each taxpayer shall prepay its estimated tax under this chapter in installments in accordance with the following schedule:

(1) On June 15 of each year (for a fiscal-year taxpayer, the 15th day of the sixth month after the start of the fiscal year), a first installment comes due that is equal to one-quarter of the tax and surtax on the taxpayer's total estimated net taxable income for that year under this chapter, as that net taxable income is then estimated and reported by the taxpayer.

(2) On September 15 of each year (for a fiscal-year taxpayer, the 15th day of the ninth month after the start of the fiscal year), a second installment comes due that, when combined with the first installment, brings the total prepaid tax to one-half of the tax and surtax on the taxpayer's total estimated net taxable income for that year under this chapter, as that net taxable income is then estimated and reported by the taxpayer.

(3) On December 15 of each year (for a fiscal-year taxpayer, the 15th day of the 12th month after the start of the fiscal year), a third installment comes due that, when combined with the first two installments, brings the total prepaid tax to three-quarters of the tax and surtax on the taxpayer's total estimated net taxable income for that year under this chapter, as that net taxable income is then estimated and reported by the taxpayer.

(4) On March 15 of each year (for a fiscal-year taxpayer, the 15th day of the 15th month after the start of the fiscal year), a fourth installment comes due that, when combined with the first three installments, brings

the total prepaid tax to 100 percent of the tax and surtax on the taxpayer's total estimated net taxable income under this chapter for the year in question, as that net taxable income is then estimated and reported by the taxpayer.

(c) If, because of unexpected events, a taxpayer has to revise its total estimated net taxable income downward so significantly that its prior installments that year under (b) of this section equal or exceed the amount to which the total prepaid tax is to be brought when the next installment comes due, then the taxpayer needs only to report the current estimate of its total tax for that year and does not need to make any further payment as an installment at that time. No refund will be made at that time as the result of a taxpayer's having an apparent overpayment from its prior installments; however, if the condition of overpayment continues until the time of the department's assessment under 15 AAC 21.700, the remaining overpayment will then be handled as an ordinary refund under 15 AAC 21.720.

(d) At the time a taxpayer files its tax return required under 15 AAC 21.700, the taxpayer shall pay the excess, if any, of its total tax over the amount already paid by the taxpayer in its installments under this section.

(e) If the department's assessment under 15 AAC 21.700 shows a total tax for a taxpayer greater than the amount already paid by the taxpayer in its installments and its payment made at the time of filing its return under 15 AAC 21.700 for that year, the taxpayer shall pay the additional amount of tax on or before September 30 (for a fiscal-year taxpayer, the last day of the ninth month after the month in which the taxpayer's latest fiscal year ended).

(f) Repealed 9/15/82.

(g) Payments and reports required under this section shall be made on the same basis as returns required under 15 AAC 21.700. (Eff. 2/22/79, Reg. 69; am 5/21/81, Reg. 78; am 9/15/82, Reg. 83)

Authority: AS 43.05.080; AS 43.05.280; AS 43.21.070; AS 43.21.090

15 AAC 21.720. REFUNDS. (a) The department will refund to a taxpayer any overpayment of the taxpayer's tax for the year under this chapter on or before September 30 of the following year (in the case of a fiscal-year taxpayer, the last day of the ninth month after the month in which the taxpayer's fiscal year ended). The amount of the overpayment will be determined on the basis of the tax as determined by the department in its assessment under 15 AAC 21.700 for the year in question, unless the overpayment arises from a reduction in the assessment as the result of a subsequent audit by the department or a carryback of a later year's net loss under 15 AAC 21.070. In the case of such a reduction in a taxpayer's assessment, the refund by the department will equal that reduction. In addition, the department will simultaneously pay the taxpayer any interest due on the refund as computed in accordance with 15 AAC 21.730.

(b) At its option, the taxpayer may elect to have the department apply the amount of a refund (including any interest) under this section as a credit against future payments of tax coming due under this chapter, instead of remitting the refund to the taxpayer.

(c) A claim for credit or refund of a tax paid under AS 43.21 arising from a change in AS 43.21 retroactively applied, must be filed by the taxpayer within three years from the date the original return was due or filed, whichever is later. (Eff. 2/22/79, Reg. 69; am 3/26/82, Reg. 81)

Authority: AS 43.05.080; AS 43.05.280; AS 43.21.070; AS 43.21.090 sec. 20, ch. 116, SLA 1981

15 AAC 21.730. COMPUTATION OF INTEREST. (a) On Unpaid Taxes. A taxpayer shall pay interest at the rate prescribed in AS 43.05.225 for that portion of its taxes remaining unpaid after payment becomes due. This interest must be computed for the period beginning from (and including) the applicable starting date specified in this subsection and ending with (but not including) the date of payment. For purposes of this subsection

(1) for an installment under 15 AAC 21.710(a) or (b), the starting date is the date specified for that installment in the schedule in 15 AAC 21.710(a) and (b); but the only amount that may be considered unpaid in connection with an installment payment is the amount (if any) by which the installment actually paid falls short of what the amount of that installment should be, as indicated from the taxpayer's report filed for that installment;

(2) for a payment required to be paid under 15 AAC 21.710(d) at the time the taxpayer files its annual return, the starting date is the earlier of (A) the date the return is filed or (B) the date the return is required to be filed (not counting any extension for filing granted under 15 AAC 21.710(d)); but the only amount that may be considered unpaid in connection with a payment made at the time of filing is the amount (if any) by which that payment falls short of the amount that should be paid as indicated from the return;

(3) for a payment required under 15 AAC 21.710(e) to satisfy an assessment by the department, the starting date is the date specified in that section for the payment;

(4) for a payment required as the result of an audit that increases the assessment for a tax year, the starting

date is September 30 of the year following that tax year (for a fiscal-year taxpayer, the last day of the ninth month after the month in which that tax year ended).

(b) On Refunds. Interest at the rate prescribed in AS 43.05.280 will be paid to a taxpayer for a refund under 15 AAC 21.720. This interest will be computed for a period beginning from (and including) the applicable starting date specified in this subsection and ending on a date chosen by the department that is not more than 30 days before the date of the refund check or wire transfer. For purposes of this subsection

(1) when the refund arises from one or more installments under 15 AAC 21.710(a) or (b) that partially or wholly exceeded the amount of the department's original assessment under 15 AAC 21.700(e), the starting date is the date of each such installment;

(2) when the refund arises from a payment required to be paid under 15 AAC 21.710(d) at the time the taxpayer files its annual return, the starting date is the date the payment is made;

(3) for a refund arising from a reduction in the assessment for a tax year as the result of a subsequent audit by the department, the starting date is September 30 of the year following that tax year (for a fiscal-year taxpayer, the last day of the ninth month after the month in which that tax year ended);

(4) for a refund arising from a reduction in the assessment for a tax year as the result of a carryback of a later year's net loss, the starting date is September 30 of the year following the tax year whose net loss is being carried back (for a fiscal-year taxpayer, the last day of the ninth month after the month in which the tax year ended whose net loss is being carried back).

(c) On Credits Arising From Retroactive Amendments To AS 43.21. Interest at the rate prescribed in AS 43.05.280 will be credited to a taxpayer for a reduction in tax liability resulting from retroactive amendments to AS 43.21. This interest will be computed for a period beginning from (and including) the date an overpayment was made and ending with (but not including) the date the credit is applied. For purposes of this subsection, the amount of an overpayment is the amount by which the original payment would have been reduced if the retroactive amendments to AS 43.21 had been in effect for the income period giving rise to that original obligation. The date the credit is applied will be the earliest date on which the taxpayer would be required to submit a payment to the department with a declaration of estimated tax or as a final payment of tax under AS 43.21 or AS 43.20. The balance of the credit, if any, will be applied to subsequent payments on the dates on which the taxpayer would be required to make a payment under AS 43.21 or AS 43.20, with interest continuing on the balance of the credit until the balance is applied in full. (Eff. 2/22/79, Reg. 69; am 3/26/82, Reg. 81)

Authority: AS 43.05.080; AS 43.05.225; AS 43.05.280; AS 43.21.090 sec. 20, ch. 116, SLA 1981

15 AAC 21.740. CIVIL PENALTIES. For unpaid taxes to which 15 AAC 21.730(a) applies, the civil penalties provided by AS 43.05.220 will be imposed beginning the day after the starting date specified in the applicable paragraph of that section. (Eff. 2/22/79, Reg. 69; am 5/21/81, Reg. 78)

Authority: AS 43.05.080; AS 43.05.220; AS 43.21.090; AS 43.21.100

15 AAC 21.750. RELIEF. If the methods of allocation and apportionment provided in this chapter do not fairly

represent the extent of a corporation's business activity in the state, the corporation may petition for or the department may require, in respect to all or any part of the corporation's business activity, if reasonable, the employment of any method authorized under art. IV, sec. 18, of the Multistate Tax Compact (AS 43.19.010) to effectuate an equitable allocation and apportionment of the corporation's income. (Eff. 2/22/79, Reg. 69; am 3/26/82, Reg. 81)

Authority: AS 43.05.060; AS 43.05.070; AS 43.05.080; AS 43.19.010 (Art. IV, sec. 18); AS 43.21.050; AS 43.21.090

15 AAC 21.800. APPLICATION TO THE 1978 TAX YEAR. The regulations under this chapter as originally adopted apply beginning with the 1978 tax year for all corporations that were or became taxpayers under this chapter during that tax year. (Eff. 2/22/79, Reg. 69)

Authority: AS 43.05.080; AS 43.21.090

15 AAC 21.810. STATUTE OF LIMITATIONS. Except as otherwise provided in AS 43.05.260 or AS 43.05.270, the department will, in its discretion

(1) amend an assessment under this chapter no later than three years from the date a return is due or filed under this chapter, whichever is later; and

(2) collect tax, penalties, and interest under this chapter as specified in an assessment or in an amendment to that assessment no later than six years from the original date of that assessment or, if amended, the date of the amendment to that assessment. (Eff. 2/22/79, Reg. 69; am 3/26/82, Reg. 81)

Authority: AS 09.10.010; AS 43.05.080; AS 43.05.260; AS 43.05.270; AS 43.21.090

15 AAC 21.820. FISCAL-YEAR TAXPAYERS. All taxpayers shall report and pay tax under this chapter on a calendar-year basis unless they have received prior written authorization from the department to report and pay tax under this chapter on a fiscal-year basis. The department, in its discretion, will grant such an authorization to a taxpayer, but only if the taxpayer's financial accounting is done on a fiscal-year (as opposed to calendar-year) basis. If granted, each such authorization by the department authorizes a taxpayer to report and pay tax under this chapter on the basis of only the fiscal year that is used for purposes of the taxpayer's financial accounting and not on the basis of any other fiscal year. A taxpayer thus authorized to use its financial accounting fiscal year is a "fiscal-year taxpayer." (Eff. 2/22/79, Reg. 69)

Authority: AS 43.05.080; AS 43.19.010 (Art. IV, sec. 18); AS 43.21.090

15 AAC 21.830 — 15 AAC 21.890. Reserved.

ARTICLE 7.

GENERAL PROVISIONS

Section
900. Definitions
9760. (Repealed)
9770. (Repealed)
9780. (Repealed)
9790. (Repealed)

15 AAC 21.900. DEFINITIONS. In this chapter

(1) "allocate," in the sense of production allocated to a lease or property, means to attribute (pursuant to the terms of a pooling agreement, unit agreement, lease-line well agreement, drainage agreement or other similar

agreement between the production-interest owner(s) of the lease or property and the production-interest owner(s) of an adjacent lease or property, or pursuant to the terms of an order or decision by an appropriate regulatory agency or by a court) to that lease or property part or all of the production from one or more wells bottomed on the adjacent lease or property;

(2) "Btu-equivalent" means a barrel of oil or six Mcf of gas; except that if the Btu-equivalents of the proved reserves of oil originally in place in the field that includes a particular lease or property do not exceed 20 percent of the Btu-equivalents of the proved reserves of gas originally in place in that field, or vice versa, then "Btu-equivalent" will be understood to refer to the unit of production (barrel of oil or Mcf of gas) of the dominant reserve of that field for purposes of this chapter; except, further, that if a taxpayer uses a similar but different unit of production for its unit-of-production amortization or depreciation for financial accounting purposes, then "Btu-equivalent" will be understood to refer to the unit of production used in that amortization and/or depreciation;

(3) "capital lease" means a lease classified as a capital lease from the standpoint of the lessee under FASB—13;

(4) "CDS vessel" means a United States flag vessel built for use in foreign trade which receives (while it is so used) a subsidy for the differential in construction costs between building it in the United States and building it elsewhere;

(5) "CDS/ODS vessel" means a United States flag vessel built for use in foreign trade which receives (while it is so used) both the subsidy for a CDS vessel and the subsidy for an ODS vessel;

(6) "commercial production" means the production of oil and gas for purposes of sale or other beneficial use not associated with the exploration and development of the field in which the lease or property lies, except when the sale or other beneficial use is incidental to the testing of an unproved well or unproved completion interval;

(7) "entitlements treatment" refers to the issuance, purchase, sale or use of whole and/or fractional entitlements associated with refining a particular run of oil pursuant to 10 CFR §§ 211 and 212, or to the treatment of that oil under any other program having a similar effect which the United States Department of Energy may adopt or administer as a replacement or continuation of the present entitlements program;

(8) "estimated value of remaining oil and gas reserves" means the excess, if any, of the present value of future cash flow from the anticipated disposition of oil and gas reserves at a future date (as that value may be required to be recognized under Reserves Recognition Accounting in the taxpayer's financial statements under Securities and Exchange Commission Release No. 33-5966 (AS-253) or modifications thereof) over the depreciated cost of such reserves;

(9) "FASB" means the Financial Accounting Standards Board;

(10) "FASB—13" means FASB's Statement of Financial Accounting Standards No. 13 "Accounting for Leases" (November 1976), as amended or interpreted by FASB's Statement of Financial Accounting Standards No. 17 "Accounting for Leases — Initial Direct Costs" (November 1977), FASB's Statement of Financial Accounting Standards No. 22 "Changes in the Provisions of Lease Agreements Resulting from Refundings of Tax-Exempt Debt" (June 1978), FASB's Statement of Finan-

cial Accounting Standards No. 23 "Inception of the Lease" (August 1978), FASB Interpretation No. 19 "Lessee Guarantee of the Residual Value of Leased Property" (October 1977) and FASB Interpretation No. 21 "Accounting for Leases in a Business Combination" (April 1978);

(11) "FERC" means the Federal Energy Regulatory Commission of the United States Department of Energy, or the agency succeeding to its regulatory functions;

(12) "FERC's Uniform System of Accounts for Class A and B natural gas companies" means the system of accounts in 18 CFR § 201 applicable to Class A and B natural gas companies (as defined there) which was in effect on January 1, 1978;

(13) "FERC's Uniform System of Accounts for Class C and D natural gas companies" means the system of accounts in 18 CFR § 204 applicable to Class C and D natural gas companies (as defined there) which was in effect on January 1, 1978;

(14) "FERC's Uniform System of Accounts for oil pipelines" means the system of accounts in 49 CFR § 1204 applicable to pipelines transporting crude oil which was in effect on January 1, 1978;

(15) "fiscal year" means a period of one year which begins on a date other than January 1;

(16) "fiscal-year taxpayer" is defined in 15 AAC 21.820;

(17) "gross share" means the volume of production attributable to a production interest before any deductions described in 15 AAC 21.200 — 15 AAC 21.290 which may be chargeable to that production interest;

(18) "Jones Act vessel" means a United States flag vessel built for use in domestic trade;

(19) "LNG" means a cryogenic liquid formed from normally gaseous hydrocarbons, chiefly methane;

(20) "LNG transportation facility" means any or all of the following when they are parts of an integrated system to transport LNG: the LNG liquefaction plan, gathering lines to that plant, loading and unloading facilities for LNG tankers, LNG tankers themselves and facilities to regasify the LNG;

(21) "Mcf" or "Mcf of gas" means one thousand cubic feet of gas measured at 60 degrees Fahrenheit and 14.65 pounds per square inch (absolute);

(22) "ODS vessel" means a United States flag vessel built for use in foreign trade, which receives (while it is so used) a subsidy for the differential in operating costs between being manned by United States crews and being manned by foreign crews;

(23) "oil and gas" may, if appropriate, refer to either oil or gas, as well as meaning both of them in other contexts;

(24) "point of production" means

(A) for oil, the automatic custody transfer meter or unit through which the oil enters into the facilities of a carrier pipeline or other transportation carrier, and in the absence of an automatic custody transfer meter or unit, the "point of production" for oil is the outlet flange of the tank gauge (or in the absence of a tank gauge, another mechanism or device to measure the quantity of oil that has been approved by the department for this purpose) through which the oil is

tendered and accepted into the facilities of a carrier pipeline or other transportation carrier;

(B) for gas, the meter on, or nearest (measured along the course taken by the gas) to, the lease or property from which the gas is recovered, at which meter the sales stream of gas is measured with sufficient accuracy and at appropriate temperature, pressure and other condition for purposes of sale, regardless of whether the particular gas in question is actually sold at that meter;

(25) "positioning costs" is defined in 15 AAC 21.130(g);

(26) "production interest" means a royalty interest or a working interest;

(27) "proved developed reserves" means proved reserves which can be expected to be recovered through existing wells with existing equipment and operating methods, and includes

(A) proved reserves which are expected to be produced from existing completion interval(s) currently open for production in existing wells; and it is not necessary that production, gathering or transportation facilities be in place or operative, although it should be virtually certain that such facilities will be installed in the future;

(B) proved reserves which exist behind the casing of existing wells, or at minor depths below the present bottom of such wells, which are expected to be produced through those wells in the predictable future, provided the cost of making that oil and gas available for production is relatively small compared to the cost of a new well; and

(C) additional oil and gas expected to be obtained through the application of fluid injection or other improved recovery techniques for supplementing the natural forces and mechanisms of primary recovery, provided that testing by a pilot project or the operation of an installed program has confirmed, through production response, that increased recovery will be achieved;

(28) "proved reserves" means those estimated quantities of oil and gas which geological and engineering data demonstrate with reasonable certainty to be recoverable in future years from known reservoirs based upon prices and costs existing at the time the estimate is made;

(29) "proved undeveloped reserves" means those proved reserves which are expected to be recovered from new wells on undrilled acreage, or from existing wells where a relatively major expenditure is required for completion; reserves on undrilled acreage must be limited to those drilling units that offset productive units and which are reasonably certain of production when drilled; and proved undeveloped reserves for other undrilled acreage may be claimed only where it can be demonstrated with virtual certainty that there is continuity of production from the existing productive formation, and under no circumstances should estimates for proved undeveloped reserves be attributable to any acreage for which an application of fluid injection or other improved recovery technique is contemplated, unless those techniques have been proved effective by actual tests in the area and in the same reservoir;

(30) "royalty" or "royalty interest" means a basic royalty, overriding royalty, production payment (excluding loan repayment), net profits interest, or carried interest, in the production of the oil and gas;

(31) "sales delivery point" means

(A) for a taxpayer's oil and gas sold in a bona fide arm's-length sale to a third party, other than a sale to which 15 AAC 21.122(d) applies, the point of delivery under the terms of the contract or agreement for that sale;

(B) for a taxpayer's oil not sold in a bona fide arm's-length sale to a third party, the gate of the refinery to which that oil is ultimately transported; and

(C) for a taxpayer's gas not sold in a bona fide arm's-length sale to a third party, the point of delivery under the terms of the sales contract used as the reference for the sales price of the taxpayer's gas under 15 AAC 21.122 and 15 AAC 21.125;

(32) "sales price" is defined in 15 AAC 21.122;

(33) "same market" means

(A) with respect to a taxpayer's oil refined in Alaska, the Alaskan market;

(B) with respect to a taxpayer's oil landed on the U.S. West Coast (including Hawaii), the West Coast market or, if appropriate, the submarkets on the West Coast (i.e., Puget Sound, San Francico Bay, the Long Beach and Los Angeles area, and Hawaii);

(C) with respect to a taxpayer's oil landed on the U.S. Gulf Coast, the Gulf Coast market;

(D) with respect to a taxpayer's oil landed on the U.S. East Coast, the East Coast market;

(E) with respect to a taxpayer's oil landed in Puerto Rico or the U.S. Virgin Islands, the Puerto Rican and Virgin Island market;

(F) with respect to a taxpayer's gas marketed in Alaska, the Alaskan market or part of it served by gas from the same field or area as the taxpayer's gas;

(G) with respect to a taxpayer's gas marketed in the 48 contiguous states of the United States, the market for those states;

(H) with respect to taxpayer's gas marketed in a foreign country, the market in that foreign country;

(34) "taxpayer" means a corporation or, collectively, two or more corporations subject to this chapter that are parts of the same consolidated business under this chapter;

(35) "tax year" means a period beginning on January 1 and ending on the following December 31; however, for a fiscal-year taxpayer "tax year" means that taxpayer's fiscal year or, for the first fiscal year in which the taxpayer reports and pays tax on a fiscal-year basis under this chapter, that part of that fiscal year beginning on and following January 1;

(36) "voyage and port costs" is defined in 15 AAC 21.130(e);

(37) "working interest" means any interest (including fee title), in the production of oil and gas that is not a royalty interest; and

(38) "year" means tax year unless the context indicates otherwise. (Eff. 2/22/79, Reg. 69; am 5/21/81, Reg. 78; am 4/14/82, Reg. 82)

Authority: AS 43.05.080; AS 43.21.090

15 AAC 21.9760. TAXPAYER PROTESTS. Repealed 12/26/80.

15 AAC 21.9770 INFORMAL CONFERENCES, Repealed 12/26/80.

15 AAC 21.9780. FORMAL HEARINGS. Repealed 12/26/80.

15 AAC 21.9790. APPEALS. Repealed 12/26/80.

[Pages 146a-149a intentionally omitted]

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D. AFFIDAVIT OF SIDNEY DAVIDSON

State of Illinois
County of Cook } ss.

SIDNEY DAVIDSON, being first duly sworn, deposes and says:

1. My name is Sidney Davidson. I give this affidavit for use by the plaintiffs and counterclaimants (the "taxpayers") in connection with the above captioned litigation. The opinions expressed are my best professional judgment relying on my experience and utilizing materials regularly and reasonably relied upon by persons in my field.

2. I am Arthur Young Professor of Accounting and Director of Business Research at the Graduate School of Business of the University of Chicago and Lecturer in Law at the Law School of the University of Chicago. I was Dean of the Graduate School of Business of the University of Chicago from 1969 to 1974. I hold a Ph.D. in accounting with a minor in economics from the University of Michigan. I have been a CPA since 1951.

3. From 1965 to 1970 I was a member of the Accounting Principles Board and I am currently a trustee of the Financial Accounting Foundation. I am a member of the Board of Directors of seven corporations (five of which are listed on the New York Stock Exchange) and chairman of the Audit Committee of the Board in six of them. The annexed Curriculum Vitae contains a listing of my principal books, articles, academic appointments, and professional activities.

4. I have reviewed the Complaints, Counterclaim and Answers filed by the parties to the above litigation as well as the related Alaska corporate income tax laws in effect

from 1978 to 1981 and the regulations under those laws. I have also studied the Multistate Tax Compact and the Uniform Division of Income for Tax Purposes Act. I have reviewed the State's motion for summary judgment, the memorandum of points and authorities in support of that motion and the affidavits of Robert Conrad, Edward Deakin, and Thomas Horst in support of that motion. I have also reviewed affidavits submitted by the taxpayers describing their operations both in and outside of Alaska.

UNITARY OPERATIONS AND INCOME MEASUREMENT

5. When an enterprise does business in more than one state, a division of its income among the states is necessary for state income tax calculations. The income of the enterprise as a whole is the excess of all of its revenues over all of its expenses.

6. Each of the taxpayers in this case is, or is part of, a unitary enterprise. In the case of a unitary enterprise, there is no method of allocating income among the geographic areas that is completely correct conceptually because of the high degree of integration within the enterprise. However, some methods are less defensible than others and may produce misleading results. In particular, where a segment of income results from activities carried on in several states, it is inappropriate and misleading to allocate all of that income to one state.

ALASKA INCOME TAX LAWS

7. Enterprises that do not engage in oil production or transportation in Alaska but engage in other activities in Alaska are subject to AS 43.20 (the Alaska Net Income Tax). Under AS 43.20 the Alaska taxable income of an

interstate enterprise is determined by apportioning the enterprise's total income in accordance with the three-factor formula set forth in the Multistate Tax Compact (the "three-factor formula"). Included in the income apportioned to Alaska for such companies is income from oil production in states other than Alaska.

8. Corporations that engage in the production or transportation of oil in Alaska are subject to the Alaska Oil and Gas Corporate Income Tax Act, AS 43.21 (the "Oil Tax Act"). That Act provides for the exclusive allocation to Alaska of all revenue ultimately received or imputed from the sale or other disposition of crude oil extracted in Alaska. From this revenue certain expenses are deducted in order to determine taxable income from the production of oil under the Act.

9. In the paragraphs that follow reference will be made to "income from oil production." That phrase should be understood to mean income from oil production as defined by the Oil Tax Act and not income actually contributed by extraction activities in Alaska. The Oil Tax Act, as described below, attributes an inequitably large portion of total income to extraction activity at the expense of other out-of-state activities that are essential to producing the income.

10. The Oil Tax Act also provides for the exclusive allocation to Alaska of all income from the pipeline transportation of oil in Alaska. For simplicity of presentation I have restricted this affidavit to a discussion of the inappropriateness of exclusive allocation as applied to production activity. The points made apply in almost all cases to transportation as well.

11. Finally, the Oil Tax Act provides that any taxable income from Alaska activities other than Alaska oil production and transportation for corporations engaged in

oil production or transportation in Alaska shall be determined by apportionment under a three-factor formula.

12. Although the Oil Tax Act was repealed effective January 1, 1982, I will speak of it in the present tense in the paragraphs that follow.

SUMMARY OF CONCLUSIONS

13. The Alaska Oil Tax Act inappropriately taxes 100 percent of the income from oil production even though the income is attributable to activities carried on in a number of states and not just Alaska, it taxes a greater amount of income than that reasonable related to Alaska activites, it imposes taxes that are unrelated to the level of business activities in Alaska, it fails to recognize the significance of sales activities, it taxes unrealized income in contravention of general principles of income taxation and accounting, it is inconsistent with the apportionment of income provisions of virtually every other state resulting in double counting of income among the states, it taxes firms engaged in interstate unitary operations more heavily than similar firms operating in Alaska alone, thus restricting the flow of interstate commerce, and it is inconsistent with other provisions of Alaska income tax law, resulting in double counting of income within the State. Each of these attributes of the Alaska Oil Tax Act will be considered in turn.

INCOME TAXED BY ALASKA IS ATTRIBUTABLE TO ACTIVITIES OUTSIDE OF ALASKA

14. Under the exclusive allocation principle of the Alaska Oil Tax Act all of the income ultimately received or imputed from the sale or other disposition of crude oil

extracted in Alaska is attributed to Alaskan operations.[1] None of the income is attributed to the myriad of activities engaged in by the taxpayers outside of Alaska that are essential for producing income. The cost, or a portion of the cost, of such activities is subtracted from the revenues attributed to Alaska, but the Oil Tax Act assumes that none of these essential activities makes any contribution to income.[2]

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[1]In his affidavit, Deakin describes this procedure as "separate accounting" and uses that term regularly. One might assume that separate accounting is a term commonly used in financial accounting or managerial accounting analysis. The term is used in tax accounting literature, but I know of no place in the literature of financial or managerial accounting where the term separate accounting is used. It is not included as a term to be defined in the two major dictionaries in accounting: Kohler, *A Dictionary for Accountants* (5th Ed.), Prentice-Hall (1975) and Davidson, Stickney and Weil, *Accounting: The Language of Business* (4th Ed.), Horton (1979). The term does not appear in Accounting Principles Board Statement No. 4, *Basic Concepts and Accounting Principles Underlying Financial Statements of Business Enterprises*, American Institute of Certified Public Accountants (1970), nor is it listed in the index of any of the standard handbooks in accounting: Davidson and Weil, *Handbook of Modern Accounting*, (2nd Ed.), McGraw-Hill (1977); Seidler and Carmichael, *Accountants' Handbook*, (6th Ed.), Ronald Press (1976); Davidson and Weil, *Handbook of Cost Accounting*, McGraw-Hill (1978).

[2]AAC 21.290(b) as amended creates the illusion of allowing some indirect profit recognition for general overhead and administrative activities — but it is nothing more than an illusion. In describing the amount of general overhead and administrative expense that may be deducted in calculating income, the Act provides for the deduction of a portion of "general overhead and administrative expense worldwide (including a reasonable amount of profit, if any, that is actually allocated to general overhead and administrative activities for purposes of reporting that year's earnings and profits to stockholders) . . ." However, generally accepted accounting principles, which are binding on the taxpayers, do not permit *any* profit to be added to overhead and administrative costs when deducting them from reve-

15. No oil can be extracted unless a host of other activities are performed in advance. The effectiveness of extracting oil, moreover, is enormously enhanced by many other activities that take place off-site. A portion of the income from the production of oil should be attributed to these essential prior and current activities, many of which occur outside of Alaska. Not to do so results in inappropriate allocation of the income stream to one activity among the many that are necessary. Some of these essential activities are outlined in the paragraphs that follow.

16. Before oil can be produced it obviously must be found. The exploration activities that lead to the discovery of the petroleum field are as essential as later extraction activities in producing income. As explained in the taxpayers' affidavits, the vast majority of the exploration-related activities that led to the discovery of oil at Prudhoe Bay and that today are directed at finding other petroleum resources in Alaska have occurred in the lower 48, not in Alaska. For example, almost all of the taxpayers' seismic data processing, geological and geophysical analysis, log analysis, stratographic mapping, economic analysis, lease sale evaluation and preparation, and exploration oversight and coordination (without which there would be no income) has taken place in the lower 48. The taxpayers' experience in looking for oil outside Alaska, moreover, has greatly helped in the search for oil in Alaska.

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nue in the calculation of income of the enterprise as reported to stockholders. The Act permits profit to be recognized *if* reflected in the financial statements, but the rules that govern financial reporting prohibit the taxpayers from allocating any profit to general overhead and administrative activities in their financial reports. (This, however, does not mean that no profit is specifically attributable to those activities since profit in the financial statements is attributed to the sum of all activities.)

17. The taxpayers' efforts to find oil in Alaska cannot be separated from exploration activities elsewhere. It is highly unlikely that every exploration effort will prove successful. A large unitary enterprise will carry on exploration activities in several states concurrently in the hope that one or more will be productive in an amount sufficient to cover the costs of all exploration. If the enterprise were to concentrate its exploration activities in only one state, the risks would be substantially increased. To a risk-minimizing interstate company, therefore, all of its U.S. exploration activities must be looked at as one operation for income division purposes.

18. Keesling and Warren in an article title "California's Uniform Division of Income for Tax Purposes Act" in 15 UCLA Law Review 156 at 173-174 (1976), provide an apt analogy:

> "An osprey is observed diving repeatedly into a lake searching for fish. On the ninth attempt it comes up with a fish in its mouth and flies off to its nest to feed its young. According to principles underlying the use of separate accounting in the allocation of business income, each separate dive might be considered as a separate transaction and the conclusion reached that the first eight were unsuccessful and wasted and that sole credit for the success in obtaining a meal for the bird's babies should be given to the ninth one. All nine tries, however, are clearly linked together by a common purpose: the desire to obtain food. Furthermore, since the bird has no way of knowing which dive will be successful and which not successful, they are linked together by a common necessity: the necessity to make all of the attempts, unsuccessful as well as successful, in order to achieve the desired objective. This reasoning leads to the

> conclusion that all of the efforts formed parts of a single enterprise, each of which is as essential to the eventual success thereof as any of the others, and credit should be accorded proportionately."

The authors liken the drilling of oil wells to the dives of an osprey and conclude that where an exploration company finds oil in one out of nine ventures:

> "... the drilling of the nine wells would be considered as parts of one over-all enterprise which was successful only in the amount of the actual over-all profit, and a portion of such profit would be attributed to the drilling operations in each of the nine states."[3]

19. After an oil field is discovered, a variety of problems must normally be addressed and solved before production can begin and income be earned. In the case of Prudhoe Bay, for example, reservoir models had to be developed and analyzed to determine the optimum production method for the field. Permafrost problems along with a host of other Arctic obstacles had to be resolved, and the Prudhoe Bay production facility had to be designed, constructed and installed. As the taxpayer's affidavits emphasize, the majority of this work was also performed by engineers and other professional employees in the lower 48 states, not in Alaska.

20. Successful extraction in Alaska, moreover, depends on a myriad of concurrent activities in the lower 48. Although North Slope crude is physically extracted in Alaska, the oil could not be extracted (or could be extracted only at substantially greater cost) if it were not

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[3]In a recent brief in another case, Parker Drilling Co. v. State of Alaska Department of Revenue, No. 3AN 79-6932 Civil, the State itself appears to recognize the validity of this analogy.

for the geological, geophysical and engineering work, purchasing services, logistical support, and a management provided by the taxpayers in the lower 48.

21. All these activities are essential to profitable operations. Yet, while almost all take place outside of Alaska, the Oil Tax Act attributes no profit to them or the locale in which they are performed. Some equitable sharing of profit among the several states is required, but the Oil Tax Act provides for an exclusive allocation of all of the profits to the portion of the activity that is carried on in Alaska.

THE TAXES IMPOSED BY THE OIL TAX ACT ARE UNRELATED TO BUSINESS ACTIVITY

22. The taxes imposed by the Oil Tax Act are not necessarily related to the level of a taxpayer's business activity in Alaska. Consider an enterprise exclusively engaged in oil activity in Alaska. All activities essential for oil production and all sales activity are carried on in Alaska. The enterprise now discovers that various production-related and sales-related activities can be carried on more efficiently (i.e. at a lower cost) in other states. If these activities were moved to other states, those states would properly apportion a percentage of the enterprise's taxable income to themselves under the three-factor formula. Even though substantial activity would have been moved to other states, this fact would be ignored by the Oil Tax Act. The Act would continue to allocate 100 percent of the enterprise's income to Alaska. Indeed taxable income in Alaska would be increased because the enterprise's total pretax income would be greater as a result of lower cost operations. As support activity is moved from Alaska, income tax payable in Alaska increases. Certainly a paradoxical result.

23. The converse of the results of the previous paragraph als holds true. This is shown by considering an oil producing firm that extracts oil in Alaska but carries on many activities in other states that are essential in order to extract and sell this oil. The enterprise has determined that this is the most economically efficient method of operation. It pays tax in other states on a part of this income as computed under the three-factor formula. Alaska, however, under the exclusive allocation feature of the Oil Tax Act taxes the enterprise on its entire income. If the enterprise were to move more of its production-related activities to Alaska, the amount of income apportioned to and taxed by the other states would go down — as one would expect from any rational tax system. Alaska taxes, however, could not increase because Alaska is already taxing 100 percent of the income. Indeed, the Alaska tax would now be reduced since the pretax income of the enterprise would fall because the newly transferred activities would be performed less efficiently (i.e. at a higher cost) in Alaska. The tax savings from this economically inefficient move might well outweigh the higher operating costs of carrying on activities in Alaska. If so, unitary enterprises would have an incentive to transfer activities to Alaska, even though such a move could not be economically justified except for tax considerations.

24. One of the results flowing from the fact that the Alaska Oil Tax is unrelated to business acitivity is that a heavier burden is placed on interstate commerce than on intrastate commerce. The Oil Tax Act penalizes enterprises that would want for economic reasons to operate in other states. Enterprises are given an incentive to carry on operations intrastate even though it may be less efficient to do so.

SALES ACTIVITY OUTSIDE OF ALASKA IS VITAL FOR INCOME

25. The extraction activity conducted within Alaska can yield no income to be taxed unless there is postextraction marketing activity through which the oil is sold and thereby converted into income. Postextraction activities, the bulk of which take place outside Alaska, are as vital to the generation of such income as is the extraction activity that takes place within Alaska.[4] Accordingly, some portion of the income generated from disposition of the oil should properly be attributed to the postextraction sales activity. It would be inappropriate, however, to attribute all of the income to the state in which the oil is sold, just as it is inappropriate to attribute all of it to the stated in which it is extracted.

26. Just as the Oil Tax Act wholly excludes the contribution of preextraction activity conducted outside Alaska, as explained in paragraphs 14 to 21, it likewise improperly disregards the essential contribution of the postextraction sales activiey conducted outside Alaska. In short, the Alaska Oil Tax Act artificially attributes all of the income to production at the wellhead in Alaska despite the fact that activities essential to the creation of such income are carried on in other states both before and after extraction. Income should not all be claimed by the

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[4]Recognizing the importance of having an organization capable of marketing large quantities of crude oil in the United States efficiently, The British Petroleum company ("BP") decided, soon after it made a major oil discovery on the North Slope, to merge with The Standard Oil Company ("Sohio"). BP's reasoning, which is described in the affidavit of Robin W. Adam, makes eminently good sense from a business standpoint. Without the kind of marketing capacity that the Sohio merger provided, the income potential of the reserves discovered by BP would have been less.

state where the oil goes nor by the state from which it comes, but should be shared equitably by all the states that contribute to the earning of income.

INCOME IS RECOGNIZED ONLY WHEN OIL IS SOLD

27. The Alaska Oil Tax Act in effect levies an income tax on the net value of oil as it is extracted at the wellhead, in many cases long before it is sold. Contrary to the Oil Tax Act, income for tax purposes is regularly recognized as occurring only when there is a sale (or other transfer of title) to a third party. Increments in value are not recognized as income until there is an actual market transaction. Prentice-Hall, *1982 Federal Tax Course,* Prentice-Hall (1982), paragraph 1201; Pechman, J.A., *Federal Tax Policy,* (3rd Ed.), Brookings Institution (1977), p. 106. To use a familiar analogy, if fruit-bearing trees can now bloom in what was previously a desert as a result of irrigation, no income is recognized as the trees are planted and take root. Income is not recognized as the trees grow, nor when they bear fruit and the fruit is picked. Only when the fruit is sold is income recognized. In oil operations, no federal taxable income is recognized when an oil field is first discovered despite the fact that the discovered reserves could readily be sold. If further exploration indicates that the quantity of reserves is greater than first estimated, no income is recognized although these additional proved reserves may readily be sold. Similarly, oil extracted from the reserves does not give rise to income, even if it may readily be sold. Only when the oil is sold does income arise.

28. Generally accepted accounting principles also require realization, that is sale or transfer of title to a third party, before income is recognized. The general principle

is set forth in Accounting Principles Board Statement No. 4, *Basic Concepts and Accounting Principles Underlying Financial Statements of Business Enterprises,* American Institute of Certified Public Accountants (1970), paragraph 181, S-1F, which states that "Revenue is recorded when products are sold, services are provided, or enterprise resources are used by others. Revenue is also recorded when an enterprise sells assets other than products (usually presented as part of a gain or loss — see paragraph 198)." Principle S-6 of paragraph 184 of that statement expands on the treatment of production by saying,

> "Utility added to assets by the internal profit-directed activities of the enterprise is generally not recorded at the time of production. Instead, historical or acquisition costs, including costs of the production process, are shifted to different categories of assets or to expenses as events in the enterprise indicate that goods and services have been used (either partially or completely) in the production operations of the period. The costs that continue to appear in asset categories are deducted from revenue when the products or services to which they have been related are sold at a later date. . . ."

29. I know of no oil companies that recognize revenue in their income statements before oil is sold and delivered.[5] As I noted some time ago in a chapter on realiza-

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[5]Deakin in paragraphs 42 and 43 of his affidavit asserts that "Revenues for oil production are properly recognized at the time of production," presumably in accord with generally accepted accounting principles. He cites Accounting Principles Board Statement No. 4, *Basic Concepts and Accounting Principles Underlying Financial Statements of Business Enterprises,* American Institute of Certified Public Accountants (1970), paragraph 184, section S-6D, which

tion, "The view that income requires a separation from the firm in an exchange transaction remains the dominant one in accounting and law today." Backer, M., editor, *Modern Accounting Theory,* Prentice-Hall (1966), p. 101. That statement is as true today as when I wrote it more than a decade and a half ago.

THE OIL TAX ACT IS INCONSISTENT WITH LAWS OF MOST OTHER STATES.

30. The exclusive allocation feature of the Oil Tax Act is inconsistent with the three-factor apportionment formula adopted by a substantial majority of the states (and by Alaska for other than oil production). The three-factor formula correctly recognizes that all activities contribute to the earning of income; the Oil Tax Act allocates all income to production. As a result of this inconsistency the Oil Tax Act can and does produce double counting of income for state tax purposes. Alaska taxes 100 percent of the income that other states are entitled to tax and do tax for activity carried on within their borders.

31. While it is true that apportionment is not always applied uniformly by the large number of states that have adopted a formula-apportionment system, the differences can be described as differences in the degree of application of the apportionment principle. The exclusive alloca-

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states that "Revenue may be recorded at the completion of production of precious metals. . . ." That section of Paragraph 184 is immediately followed by section M-6D which states "Recognition of revenue at completion of production is an exception to principles S-1F and S-6." Those general principles are set forth in paragraph 28 of this affidavit. All integrated oil companies of which I know follow the general principle; none follows the exception described by Deakin.

tion feature of the Alaska law is a difference in kind.[6] In no way can it be reconciled with the long standing efforts to bring about uniform treatment of corporate income among the states.

THE OIL TAX ACT DISCRIMINATES AGAINST INTERSTATE COMMERCE

32. The effect of the Alaska Oil Tax Act is to provide a substantial tax advantage for Alaskan enterprises engaged in activity only at the intrastate level compared to unitary enterprises engaged in interstate commerce. This can be seen from a simple example.

A. Assume that a unitary enterprise producing oil in one or more states other than Alaska has $90 million of pretax income resulting from the use of

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[6]Deakin in paragraph 13 of his affidavit cites Cohen *[Apportionment and Allocation Formulae and Factors Used by States in Levying Taxes Based on or Measured by Net Income of Manufacturing, Distributive and Extractive Corporations*, New York: Controllership Foundation, Inc., (1954)] as authority for the view that differences among the states exist in the way the apportionment features of the Multistate Tax Compact are applied. Cohen does indeed point out those differences, but he nevertheless concludes at pages 7 and 8 that: "The concepts of separate accounting and unitary business, *i.e.*, a business wherein different components of the activity are interrelated and benefited each by the other, are incompatible by their very natures. Except in the simplest of cases (such as the example cited), determination by the separate accounting method of the economic effect within prescribed geographic limits of any particular phase of a unitary business, is artificial and extremely awkward. It follows that attempted separate accounting for such central staff functions as purchasing, advertising, financing, accounting, engineering, legal, tax determination, and the like, and for general revenue items would be most arbitrary, uncertain, and difficult."

140 units of the apportionment base.[7] Now an opportunity for oil production in Alaska arises. By adding people and property in Alaska totalling 80 units of apportionment base and people and property in other states totalling 20 units of apportionment base, $70 million of additional pretax income could be secured. The unitary firm would then have pretax income as follows:

Source of Income	Units of Allocation Base	Pretax Income In Millions
Non-Alaska oil production:	140	$ 90
Oil extracted in Alaska:		
Alaska units	80	$ 70
Other states units	20	
Total	240	$160

B. Because of the increase in the oil company's activities both inside and outside of Alaska, the amount of income taxed by states other than Alaska would increase by $17 million. Prior to the company's engaging in Alaska activities, states other than Alaska had taxed the enterprise on $90 million of taxable income. Now the income taxed by states other than Alaska would be $107 million:

$$\frac{140 + 20}{240} \times \$160 \text{ million} = \$107 \text{ million}$$

C. The Oil Tax Act, however, fails to recognize the legitimate right of states other than Alaska to tax any of the $70 million increase in income. Instead, under the exclusive allocation provisions of the Oil

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[7]Under the three-factor apportionment formula, the apportionment base is made up of equal parts of property, payroll and sales. For convenience of exposition in this and subsequent examples, the items are combined and described as "units of the apportionment base."

Tax Act, Alaska will allocate to itself and tax the entire increase in income of $70 million. As a result of Alaska's exclusive allocation approach, the interstate enterprise's taxable income would go up by $87 million ($70 million taxable in Alaska and $17 million taxable elsewhere), even though the actual income has gone up by only $70 million.

D. Instead of the interstate unitary firm enlarging its activity to include oil production in Alaska, assume that a newly organized firm operating only in Alaska carries on this oil production. Also assume, probably unrealistically, that by using a similar quantity of 100 units of the apportionment base the intrastate firm also produces pretax income of $70 million. Because the firm operates only in Alaska, the firm will be taxed on only $70 million.

E. As this example shows, the effect of the Oil Tax Act is to discriminate against interstate enterprises wishing to engage in oil production in Alaska in favor of enterprises operating only in Alaska. Although the interstate enterprise will be subject to tax on $87 million, the enterprise operating exclusively intrastate would have taxable income of only $70 million. Taxable income for the interstate firm would be $17 million (= $87 million − $70 million) greater for the same operation. This added burden on the interstate firm results from Alaska's failure to recognize that the income from oil production in Alaska of the interstate company is not attributable solely to Alaska activities.

33. Even after an interstate enterprise begins operating in Alaska, the Oil Tax Act continues to discriminate in favor of purely intrastate enterprises as the following example shows.

A. Assume, for example, that despite the discrimination against it in beginning production, the interstate enterprise described in paragraph 32 begins production in Alaska and earns an added $70 million in income as expected. A new field then opens up and the interstate enterprise has to decide whether to participate in that field. This time it is anticipated that 200 units of the apportionment base will increase taxable income by $140 million. The 200 units consists of 40 units for activities outside of Alaska and 160 units for extraction activity in Alaska. If the interstate enterprise decides to participate in the new field, the data for the enterprise would then be:

Source of Income	Units of Apportionment Base	Pretax Income In Millions
Non-Alaska oil activity:	140	$ 90
Initial oil extracted in Alaska:		
Alaska units	80	$ 70
Other states units	20	
Additional oil extracted in Alaska:		
Alaska units	160	$140
Other states units	40	
Total	440	$300

B. If the interstate enterprise chooses to invest in the new field, its taxable income in states other than Alaska would increase by $29 million. As described in paragraph 32, after its initial move into Alaska the interstate enterprise would have taxable income in states other than Alaska of $107 million. Now, states other than Alaska would tax the interstate enterprise on $136 million of income, calculated as follows:

$$\frac{140 + 20 + 40}{440} \times \$300 \text{ million} = \$136 \text{ million}$$

C. Under the exclusive allocation feature of the Oil Tax Act, however, Alaska again would refuse to recognize the legitimate rights of other states to tax any part of this added income and would tax the entire increase in income of $140 million. Thus, the total increase in *taxable* income for the interstate enterprise would be $169 million ($29 million outside of Alaska and $140 million in Alaska).

D. If a purely intrastate firm were able to participate in the same field and also earn $140 million in income, on the other hand, its taxable income would only increase by $140 million. The increase in taxable income for the interstate firm would be $29 million (= $169 million − $140 million) greater than for the intrastate firm for the same expansion of production. When it comes to expanding production as well as with initial production, therefore, the effect of the exclusive allocation feature of the Alaska Oil Tax Act is to tax enterprises engaged in interstate commerce more heavily than those engaging only in intrastate activities, thus burdening interstate commerce.

34. The examples in the two previous paragraphs illustrate the inevitable "double counting" effect for interstate enterprises produced by the exclusive allocation feature of the Oil Tax Act. The problem can also be seen in terms of the total amount of income on which the interstate enterprise must pay taxes. In the example of paragraph 32, total pretax income is $160 million yet the firm engaged in interstate operations must pay taxes on $177 million of income ($107 million outside of Alaska and $70 million in Alaska). As the firm expands in paragraph 33, total pretax income grows to $300 million but the interstate firm must pay taxes on $346 million of income ($136 million outside of Alaska and $210 million in Alaska).

ALASKA INCOME TAX LAW IS INTERNALLY INCONSISTENT

35. Alaska has been schizophrenic in its views on how to divide multistate income. Prior to the start of Prudhoe Bay production, Alaska taxed the taxpayers under the three-factor formula. As a result, income from out of state production was apportioned to and taxed by Alaska. As soon as production began, however, Alaska switched to its exclusive allocation system.

36. This schizophrenia continued during the tax years in question. If an oil company was exploring for oil but not yet producing, a part of its income from all activities nationwide was apportioned to Alaska under the three-factor formula; this included income from oil production in other states. Once oil production began in Alaska, sharing income from oil production among the states was forgotten and the exclusive allocation feature of the Oil Tax Act became effective.

37. The appropriateness of exclusive allocation thus depends under Alaskan law upon whether or not there is oil production in Alaska. Before Alaska oil production begins, exclusive allocation is inappropriate; once Alaska oil production starts, exclusive allocation is required. Exclusive allocation of oil income is required if the income is related to oil produced in Alaska; if oil income results from production in other states before production starts in Alaska, Alaska asserts a right to demand a share of that income too.

THE OIL TAX ACT DISCRIMINATES AGAINST MULTICORPORATE ENTERPRISES WITH REGARD TO THEIR ALASKA INCOME.

38. Alaska is even schizophrenic in its current treatment of the taxpayers. As a result, even if there were no "double counting" of income among states, the Alaska income tax laws would by themselves result in a double counting of income within the State. Some of the taxpayers are engaged in oil production or transportation in Alaska under one corporate identity and are engaged in activities in Alaska other than oil production or transportation under another corporate identity. All of the income of the corporation engaged in production or transportation of oil in Alaska is taxed under the Oil Tax Act. The corporation engaged in activities other than production or transportation of oil is taxed under the provisions of AS 43.20. In applying AS 43.20, Alaska taxes a portion of the *entire* income of the unitary enterprise according to the standard three-factor formula. Included in the income to be apportioned under AS 43.20 is all of the income from Alaska oil production and transportation already taxed under the Oil Tax Act. Thus the income from oil and gas production is taxed twice within Alaska for enterprises within this category, once under the Oil Tax Act and again under AS 43.20.

CONCLUSIONS

39. The Alaska Oil Tax Act suffers from many infirmities. To begin with, the Oil Tax Act taxes income that is attributable to numerous activities outside of Alaska, including sales activities. Because it ignores these out-of-state activities, the Act imposes taxes that are unrelated to the level of business activity within Alaska. By taxing income that is attributable to activities in other states,

moreover, the Act leads to double counting of the taxpayer's income between states and discriminates against interstate commerce.

40. Because of the deficiencies in exclusive allocation, it is not surprising that Alaska has been schizophrenic in its views on income taxation. Where the question is whether Alaska should tax any percentage of the income from out-of-state production, Alaska has in many cases recognized the appropriateness of apportionment; where Alaska oil production is involved, Alaska relies on exclusive allocation. Such internal inconsistencies within the Alaska tax laws, moreover, have resulted in double counting of taxpayer's income even within the State.

Further affiant sayeth not.

/s/ Sidney Davidson
Sidney Davidson

Subscribed and sworn to before me this 27th day of July, 1982.

Notary Public in and for the
County of Cook, Illinois

My commission expires
August 20, 1984

[Curriculum Vitae Omitted]

E. AFFIDAVIT OF PETER MIESZKOWSKI

STATE OF TEXAS }
COUNTY OF HARRIS } ss.:

PETER MIESZKOWSKI, being first duly sworn, deposes and says:

1. My name is Peter Mieszkowski. I give this affidavit for use by the plaintiffs and counterclaimants in the above captioned litigation (hereinafter the "taxpayers"). The opinions expressed in this affidavit are my best professional judgment relying on my experience and utlizing materials regularly and reasonably relied upon by persons in my field.

2. I am currently Cline Professor of Economics and Finance at Rice University. I hold a Ph.D. in Economics from Johns Hopkins University and held a post-doctoral fellowship at the University of Chicago during the 1964-1965 academic year.

3. My field of specialization in economics is public finance, with special emphasis on the finances of state and local government and on fiscal federalism. I have written on state and local taxation of energy resources, international tax harmonization, various aspects of regional development, and the importance of free movements of labor and capital in a federal system. I have served as a consultant to the United States Treasury Department and other governmental agencies. I am also associate editor of two leading journals in my field of specialization, *The Journal of Public Economics* and *The Journal of Urban Economics*. A copy of my current curriculum vitae is attached.

4. Before writing this affidavit, I reviewed the Complaints, Counterclaim and Answers filed by the parties to

the above litigation, as well as the State's Motion for Summary Judgment, the Memorandum of Points and Authorities in Support of that Motion and various affidavits in support of that Motion. I have also reviewed the Alaska tax laws in effect from 1978 through 1981, the history of Alaska's taxation of the petroleum industry, and numerous statistical sources on the revenues and expenditures of Alaska and of the rest of the United States.

5. The taxpayers' other economic experts discuss a number of serious economic deficiencies in the Alaska Oil and Gas Corporate Income Tax Act, AS 43.21 (the "Oil Tax Act"). The economic invalidity of the Oil Tax Act, however, can be seen even more sharply against the backdrop of Alaska's general excessiveness in taxing the petroleum industry. My affidavit focuses on that backdrop.

I.

SUMMARY OF CONCLUSIONS

6. State governments are normally constrained from placing excessive taxes on an industry both by the fear that the industry may leave the state and also by the political concern that the taxes may be borne primarily or entirely by local residents. Because petroleum resources are a captive tax base and because virtually all of the producers of Alaskan petroleum are interstate corporations and few of the consumers are Alaskan residents, these normal constraints do not provide strong deterrence against excessive Alaskan taxation of the petroleum industry.

7. Not surprisingly, therefore, Alaska's taxes on the petroleum industry appear to be disproportionate by any reasonable economic standard. No state imposed so heavy

a tax burden on the petroleum industry even before the Oil Tax Act was enacted. Alaska's taxes on the petroleum industry, moreover, are exceedingly high compared to Alaska's taxes on other firms and individuals (95% of the taxes collected by Alaska are taken from the petroleum industry) and even compared on any reasonable basis to the *total* revenues (tax *and* non-tax) of other states.

8. By a wide margin, Alaska's expenditures are also higher than the expenditures of any other state in the Union either as a percentage of personal income or on a per capita basis. Because of the high level of petroleum revenues, furthermore, Alaska is able not only to maintain an exceedingly high level of traditional public expenditures but also to set aside sizeable funds for future use, abolish the personal income tax (and a number of other taxes that were borne primarily by local residents), refund personal income taxes that had previously been paid, provide residents with a variety of subsidized loans, and even more dramatically, give a $1,000 cash "dividend" to every man, woman and child in Alaska.

9. Alaska's disproportionate imposition of taxes on the petroleum industry presents various political, legal and equity concerns. At least three general economic inefficiencies, however, are also likely to flow from Alaska's disproportionate taxation of the petroleum industry. First, less money will be invested in existing petroleum fields and the ultimate output of such fields will be less than it otherwise would have been. At a time when the United States badly needs increased domestic petroleum production, therefore, Alaska may discourage such production. Second, because Alaska has a large source of petroleum revenue which is borne largely by out-of-state residents, it may be encouraged to embark on wasteful public expenditures with a resulting loss in the total output of the economy. Finally, the benefits to Alaskan

residents that flow from the excessive taxation of petroleum businesses (e.g., increased public services and cash "dividends" to residents) may encourage an economically unwarranted migration of capital and labor from other states to Alaska.

II

THE LACK OF POLITICAL AND ECONOMIC CONSTRAINTS ON ALASKA'S TAXATION OF THE PETROLEUM INDUSTRY.

10. As discussed later, Alaska's taxes on petroleum firms would appear to be disproportionately high compared to other states' petroleum taxes, to the taxes that Alaska imposes on other firms and individuals, and even to the total revenues of other states. This is not surprising because, as discussed below, the normal political and economic considerations that constrain states from imposing excessive taxes are very weak in the case of the Alaskan petroleum industry.

11. State legislatures are normally deterred from imposing excessive business taxes by two considerations. First, if excessive taxes are imposed on an industry, that industry may simply leave the state in favor of a better tax climate. If so, the state, in an attempt to get more tax revenue, will find itself with less revenue and will have driven away a possibly important segment of its economy. Second, if excessive business taxes are borne by local residents, the economy of the state may also suffer and the legislators will have to worry about political repercussions in the next election. Neither of these two considerations, however, is a significant deterrent to excessive taxes on Alaskan petroleum operations.

12. Many businesses can readily be moved. As a result, excessive taxation of such businesses is economically

difficult. Indeed, when businesses are easy to move, many states give such businesses tax incentives to move *to* the state.

13. The oil industry, by comparison, is a highly captive tax base. Petroleum resources are immobile and significant quantities of petroleum are found in only a few states in the Union. The petroleum industry in Alaska, moreover, has sunk enormous sums of money into developing Prudhoe Bay and other fields in Alaska. As a result, although some level of petroleum taxes would certainly lead the petroleum industry to leave Alaska, the State can impose larger taxes on the petroleum industry than on other industries without having to worry about losing its tax base. Higher taxes will discourage oil production from existing fields, as discussed later, but the effects therefrom on tax collections will be small relative to the additional revenues collected.

14. In sum, Alaska has more economic leeway to impose excessive taxes on the oil industry than on "non-captive" businesses — businesses that can easily be moved to other states and have low fixed investments. This is best seen by the fact that the petroleum industry is still operating in Alaska. It is highly unlikely that a less captive industry would operate very long in Alaska under a similar tax burden.

15. Even when a state has a captive tax base, political considerations may preclude excessive taxation. For obvious reasons, a state is always hesitant to impose huge taxes on an industry composed primarily of local firms. And if an industry is principally interstate, a state will still be concerned that taxes may be passed on to local consumers. Economic uncertainties regarding who will ultimately bear a particular business tax normally prevent a state from knowing with certainty that its own

residents will not bear the brunt of any large business tax.

16. These political constraints, however, do not apply to Alaska's taxation of the petroleum industry. It is unnecessary to decide whether Alaska's petroleum taxes are borne by the taxpayers and their shareholders or instead are passed on to consumers to see that virtually none of the taxes will be borne by Alaskan residents.

17. If the taxes are borne by the taxpayers themselves and their shareholders, the State does not have to worry about the normal political repercussions of excessive taxes because the Alaskan petroleum industry is overwhelmingly interstate. Alaska's taxes on the petroleum industry, moreover, exclude for all practical purposes those few local petroleum companies that do exist. The Oil Tax Act, for example, covered only those companies engaged in production or pipeline transportation activities in Alaska; because such companies were virtually all interstate, the Oil Tax Act effectively excluded virtually every local petroleum concern. I am informed that, from 1978 through 1980, no purely intrastate concern paid taxes under the Oil Tax Act, and that in 1981, only one purely local business was subject to the Act and even that business paid no taxes under the Act.

18. If excessive taxes on the oil industry in Alaska could be passed on to consumers, Alaskan residents would still bear at most only a small fraction of the taxes. Virtually all Alaskan oil is consumed outside Alaska. Thus, almost all of the burden of any excessive taxes on the petroleum industry would be shouldered by consumers of oil products in the other states, who, of course, have no power to vote Alaskan legislators out of office.

19. The financial effects of Alaskan petroleum taxes on local businesses and consumers is therefore close to zero.

The taxes will be borne instead either by the taxpayers and their shareholders or by consumers in other states. This contrasts sharply with other petroleum-rich states. In Texas, for example, many of the participants in the petroleum industry are local residents and a very large portion of the crude oil and natural gas produced in Texas is consumed in the state. Not surprisingly, therefore, Texas imposes much lower taxes on the petroleum industry than Alaska. The possibility that a tax may adversely affect local residents is perhaps the most effective political constraint on excessive state taxation.

20. In sum, political and economic constraints on Alaskan taxation of the petroleum industry are extremely weak. At the same time, however, because the tax revenues provide sizeable benefits for local residents, the political incentives to impose high taxes on petroleum companies are quite high. Very little of the revenue that Alaska collects from the petroleum industry goes toward providing services or protection for that industry. Instead the revenue goes toward benefitting the general population (either in the form of increased governmental services or through direct or indirect cash payments). Because the population of Alaska is small relative to the natural resource tax base, even small increases in tax rates can significantly increase the per capita benefits to the population. Since these benefits are obvious to the politicians and the general population, equity considerations that might otherwise constrain the State from imposing discriminatory taxes on petroleum businesses are substantially weakened.

21. All of these considerations interact to lessen the forces of political moderation and make legal constraints all the more important in checking the propensity of Alaska to increase its wealth at the expense of the petroleum industry and residents of other states.

22. Furthermore, it should be noted that, because state taxes can be deducted by a corporation in computing its federal tax liability, the federal government also bears a considerable part of Alaska's taxes on the petroleum industry. Thus, excessive Alaskan taxation of the petroleum industry affects *every* citizen of the U.S.

III.

ALASKA'S EXCESSIVE PETROLEUM REVENUES

A. *History of Alaskan Taxation of the Petroleum Industry.*

23. Alaska's taxation of the petroleum industry was relatively even-handed in the early 1960's. Petroleum corporations, like all other businesses in Alaska, were subject to a uniform corporate income tax that apportioned the income of interstate corporations according to the standard three-factor formula that is used by most states. Oil and gas production was also subject to a one-percent severance tax.

24. In the mid-1960's, production began at Cook Inlet and the State began to notice that it had a new and ready revenue source. Accordingly, when extra revenues were needed in 1967 to handle the Fairbanks flood of that year, Alaska turned to the petroleum industry for the funds and passed special "disaster" legislation effectively doubling the severance tax rate.

25. In 1968, a series of bills were introduced to increase the State's taxes on the petroleum industry. The result was yet another doubling of the effective severance tax rate. This increase was geared to Cook Inlet. As a result of the severance tax increase and an increase in production at Cook Inlet, petroleum severances taxes in Alaska jumped five fold from 1968 to 1971.

26. At the time of the 1968 severance tax increase, few thought that significant quantities of oil would be discovered on the North Slope; indeed, reports suggested that the industry was about to abandon its exploration efforts on the North Slope. In 1968, however, Prudhoe Bay was discovered and confirmed. This discovery increased the call for petroleum tax increases in Alaska. In 1970, accordingly, the Alaska Legislature imposed a varying severance tax that taxed production of large wells (250,000 barrels or more per day) at an 8% rate and taxed smaller wells at varying lower rates. A report commissioned by the Alaska Legislative Affairs Agency and written by a former Speaker of the Alaska House of Representatives (the "Legislative Affairs Agency report") has previously observed that this variable tax was designed to maximize the State's severance tax take from Prudhoe Bay without adversely affecting production at smaller wells in Cook Inlet.

27. In 1972, Alaska imposed a cents-per-barrel floor on the severance tax rate. The cents-per-barrel floor was imposed so that the State's taxes from the oil industry would not be affected if there was a decline in the price of crude oil (even though such a decline would almost inevitably mean a decline in the value of the oil to the taxpayer).

28. In a 1973 Special Session of the Legislature, the State imposed a 20-mill property tax on pipeline facilities. The Legislative Affairs Agency report observed that the pipeline tax was at that time "one of the largest tax measures ever to come before the legislature." As a result of the tax, the petroleum industry was given the dubious distinction of being the only industry in Alaska subject to a state property tax.

29. In the same Special Session, the State once again increased the severance tax. Although 8% remained the

top rate, the number of wells to which that rate applied was increased. The cents-per-barrel floor was revised upward. And, perhaps most significantly, the cents-per-barrel floor was for the first time tied to an "escalator" so that it would automatically rise as the "Wholesale Price Index For Crude Petroleum" (a crude oil price index published by the federal government) increased.

30. Desired increases in state spending led the 1975 legislature again to increase the State's taxes on the petroleum industry. In particular, the Legislature imposed a temporary 20-mill tax on petroleum reserves and began to investigate other means of increasing petroleum revenues such as a revision of the Alaskan corporate income tax laws.

31. In 1977, the Legislature passed a sizeable increase in the petroleum severance tax. This increase brought Alaska's severance tax rate on oil to a nominal rate of 12.25%. After this increase, the effective severance tax rate on Prudhoe Bay production was over 10% — making the Alaska severance tax the second highest oil severance tax in the country by a wide margin, and moving it quite close to the highest.

32. In the following year, the Oil Tax Act was passed — bringing to a conclusion the lengthy legislative study of how to increase petroleum revenues that had begun in the mid-1970's. The Oil Tax Act quadrupled the State's income tax revenue from petroleum corporations even holding oil production constant.

33. In response to the taxpayers' lawsuit challenging the Oil Tax Act, the Legislature later repealed the Act, effective January 1, 1982, and replaced it with an income tax using a modified apportionment approach. At the same time that it repealed the Oil Tax Act, however, the Legislature increased the top corporate income tax

bracket for petroleum and other corporations in 1981 from 9.4% to 11%, and increased the nominal oil severance tax rate from 12.25% to 15%. As a result of the last change, the effective severance tax rate on Prudhoe Bay production is now 15% — the highest petroleum severance tax rate in the nation today.

B. *The Size of Alaskan Petroleum Revenues*

1. *Alaska's Petroleum taxes are disproportionate compared to the taxes imposed on other firms and individuals.*

34. As a result of all of these tax increases, by fiscal year (FY) 1981, 95% of the tax revenues collected by the State of Alaska were collected from a handful of petroleum companies. Indeed, according to the State's own figures, Sohio alone paid almost half of all Alaskan state taxes in FY 1981 (and over half of all state income taxes). The three taxpayers in this case collectively paid 83% of all state taxes (and 90% of all state income taxes). As shown in Table 1, over $2 billion in State taxes was paid by petroleum companies in FY 1981. Other segments of the economy paid only about $100 million in state taxes.

35. According to the State's most recent projections, moreover, the petroleum industry will continue to pay 95% of total state taxes in Alaska at least through FY 1984. If the Oil Tax Act had not been repealed as of January 1, 1982, the petroleum industry would have paid an even higher percentage of state taxes in future fiscal years.

36. The petroleum industry contributes a similar percentage of all of the State's unrestricted revenues.* As

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*"Unrestricted revenues" include all of the State's revenues except for a relatively small amount of earmarked intergovernment grants-in-aid.

TABLE 1

ALASKAN STATE TAXES AND SOURCES

FY 1968 — FY 1984

FY	Total State Taxes (in Millions)	Total Petroleum Taxes(1) (in Millions)	Percent of Taxes Paid by Petroleum Industry(1)	Percent of Taxes Paid by Litigants(2)	Percent of Income Taxes Paid by Litigants(3)
1968	$ 49.7	—	—	0%	0%
1969	$ 61.3	—	—	0%	0%
1970	$ 74.2	—	—	0%	0%
1971	$ 83.6	—	—	0%	0%
1972	$ 89.3	—	—	0%	0%
1973	$ 96.2	—	—	0%	0%
1974	$ 109.7	—	—	8%	0%
1975	$ 185.6	—	—	4%	1%
1976	$ 579.7	—	—	38%	2%
1977	$ 752.7	—	—	38%	1%
1978	$ 537.8	—	—	22%	2%
1979	$ 800.6	$ 569.8	71%	47%	55%
1980	$1,412.3(4)	$1,222.6	87%	71%	78%
1981	$2,282.6	$2,173.3	95%	83%	90%
1982 Est.	$2,698.6	$2,586.7	96%	—	—
1983 Est.	$2,399.1	$2,281.4	95%	—	—
1984 Est.	$2,921.7	$2,799.1	96%	—	—

(1) No figures on total petroleum taxes are available for before FY 1979.

(2) Percent of total state taxes paid by Arco, Exxon & Sohio (state estimates).

(3) Percent of total state income taxes paid by Arco, Exxon & Sohio (state estimates).

(4) Does not take into account refunds of personal income taxes.

NOTE: All figures are provided by the State of Alaska.

TABLE 2

PERCENT OF ALASKAN STATE REVENUES PAID BY PETROLEUM INDUSTRY

FY	Percent of Total General Fund Revenues Paid by Petroleum Industry	Percent of Total Revenues Paid by Arco, Exxon & Sohio
1968	—	0%
1969	—	0%
1970	—	1%
1971	21%	0%
1972	21%	0%
1973	24%	0%
1974	31%	5%
1975	26%	3%
1976	54%	33%
1977	54%	35%
1978	55%	34%
1979	69%	53%
1980	86%	73%
1981	89%(1)	75%
1982 (est.)	89%(1)	—
1983 (est.)	87%(1)	—
1984 (est.)	88%(1)	—

(1) If investment earnings are eliminated from total revenues, the percent of revenues paid by the petroleum industry increases to about 95% in each of these years.

shown in Table 2, about 90% of the State's total unrestricted general fund revenues in FY 1981 was paid by the petroleum industry. At least through FY 1984, the petroleum industry is expected to continue to contribute approximately 90% of the State's total unrestricted general fund revenues. But those figures understate the petroleum industry's contribution to total state revenues because "nonpetroleum revenues" include investment earnings, which largely represent earnings on past petroleum revenues. If investment earnings are excluded from total receipts, 95% of general fund revenues are actually taken from the petroleum industry.

37. It is only in the last several years (in particular since the 1978 passage of the Oil Tax Act) that the petroleum industry has been forced to contribute virtually all of Alaska's tax and non-tax revenues. As shown in Table 3, the petroleum industry paid very little of the State's unrestricted revenues through the early 1970's. By FY 1976, the petroleum industry was paying slightly over half of all unrestricted revenues. Today, as noted above, the petroleum industry is paying about 95% of both taxes and unrestricted general fund revenues.

38. The increase in the petroleum industry's relative tax burden since the mid-1970's is a result of two major factors. First, the absolute level of petroleum taxes has increased substantially, particularly since the Oil Tax Act was imposed in 1978. During the same time period, the State's personal income tax, school tax, and gross revenues tax were all abolished. As noted in the State's most recent Annual Financial Report, for all practical purposes, this means that "the citizens of Alaska no longer make a direct money contribution to the cost of state government." Annual Financial Report of the State of Alaska, FY 1981, p. IV.

TABLE 3

PERCENT OF TAXES AND OTHER REVENUES PAID BY THE PETROLEUM INDUSTRY

	Percent of Taxes Paid By		Percent of Revenue Paid By	
FY	Petroleum Industry	Litigants(1)	Petroleum Industry(2)	Litigants(1)
1968	—	0%	—	0%
1969	—	0%	—	0%
1970	—	0%	—	1%
1971	—	0%	21%	0%
1972	—	0%	21%	0%
1973	—	0%	24%	0%
1974	—	8%	31%	5%
1975	—	4%	26%	3%
1976	—	38%	54%	33%
1977	—	38%	54%	35%
1978	—	22%	55%	34%
1979	71%	47%	69%	53%
1980	87%	71%	86%	73%
1981	95%	83%	89%(95%)(3)	75%
1982 (est.)	96%	—	89%(95%)(3)	—
1983 (est.)	95%	—	87%(94%)(3)	—
1984 (est.)	96%	—	88%(95%)(3)	—

(1) Arco, Exxon & Sohio
(2) Percentages shown are percentages of general fund unrestricted revenues
(3) Excluding investment earnings from total revenues

Note: All figures are provided by the State of Alaska

2. *Alaska's petroleum taxes are disproportionate compared to the taxes imposed by other states.*

39. Alaska's petroleum revenues are huge not only when compared to the revenues that the State takes in from other sources but also when compared with revenues taken in by other states. A 1978 study by Arthur Andersen found that Alaska imposed the highest tax burden on

the petroleum industry of any state in the Union — even before the Oil Tax Act. Arthur Andersen & Co., *Prudhoe Bay Field and Trans-Alaska Pipeline System: Comparative State Tax Burden Study* (Jan. 1978).

40. But Alaska's petroleum taxes are tremendous in comparison not only with other states' petroleum taxes but also with other states' *total* taxes. Total taxes for other states, *including* the taxes taken in by local governments within each state, have averaged about 12% of personal income for the last several years. In comparison, Alaskan state petroleum taxes by themselves amounted to 40% of personal income in FY 1981 — over three times the national average for *all* state and local taxes. This percentage, moreover, does not include local petroleum taxes in Alaska. If local taxes were added, Alaska's petroleum taxes would be even more out of line with the rest of the Country.

41. Alaskan state petroleum revenues (both tax and non-tax) are also disproportionately large compared to other states' total revenues. Total revenues for other state and local governments have averaged about 20% of personal income in recent years. I estimate, however, that in FY 1981, the combined revenues for the state and local governments in Alaska exceeded 90% of the personal income of the State. Petroleum revenues captured by the state government alone exceeded 60% of personal income — over three times the national average for *all* state *and* local revenue. If the petroleum revenues collected by local governments in Alaska were added to the state figures, Alaska's figures would again be even more dramatic.

42. Table 4 shows for FY 1980 the range among states of state and local revenue as a percentage of personal income. Alaska had far and away the highest revenues. Excluding Alaska, state and local revenue ranged from

14.9% of personal income in Indiana to 28.6% in Wyoming. The average for all states was 19.8% of personal income. Alaska had revenues equal to 78.3% of personal income — almost four times the national average and almost three times the percentage for Wyoming (the second highest state). Chart 1 shows this data graphically.

43. When viewed on a per capita basis, Alaska's petroleum taxes are even more out of line with the taxes taken in by other state and local governments. In FY 1981, total state and local taxes averaged about $1,060 per capita across the United States. In Alaska, however, state petroleum taxes alone took in approximately $5,300 for each man, woman and child in Alaska — over five times the national average. The $5,300 per capita, moreover, does not include local petroleum taxes in Alaska.

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* Where available, I have used FY 1981 figures. In some cases — such as comparisons among states — only FY 1980 figures are currently available. If available, FY 1981 figures would show Alaskan revenues and expenditures to be even higher compared to other states.

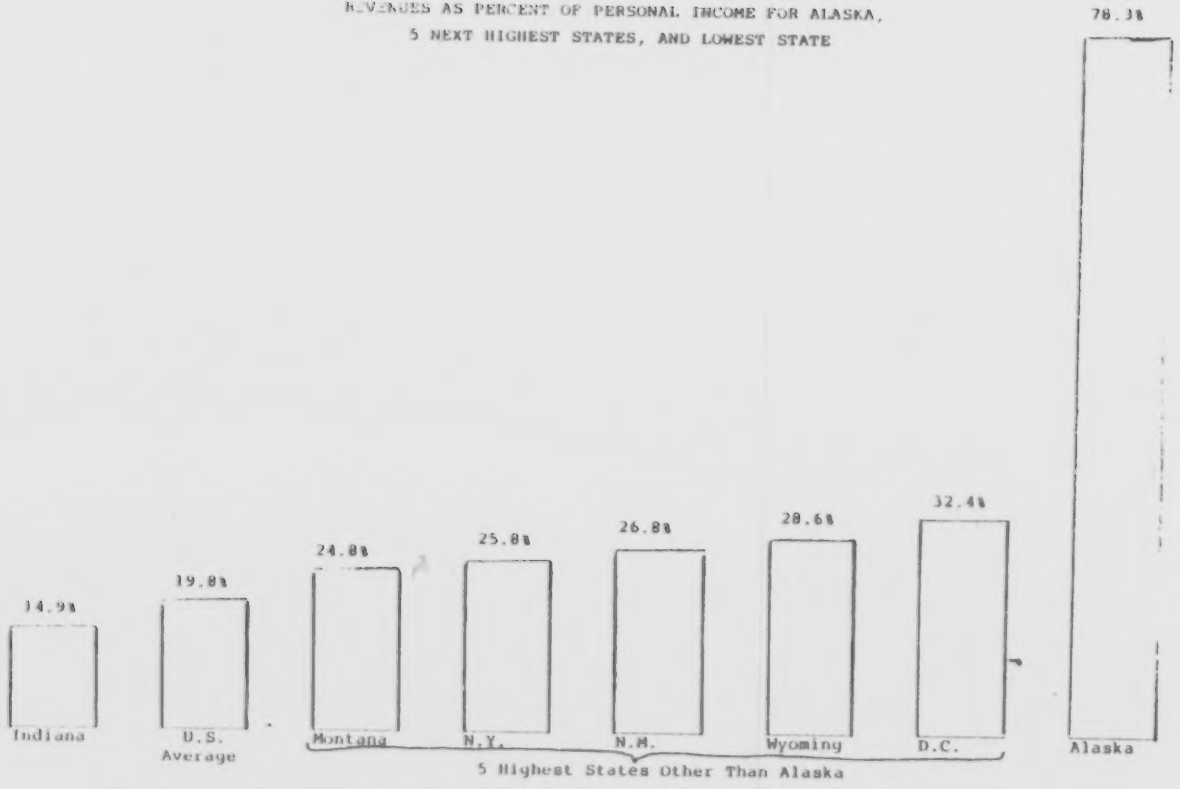
TABLE 4

FY 1980 STATE AND LOCAL REVENUES AS
A PERCENTAGE OF STATE PERSONAL INCOME

Rank	State	Percent	Rank	State	Percent
1	ALASKA	78.3%	27	California	20.2%
2	D.C.	32.4%	28	Colorado	20.0%
3	Wyoming	28.6%		AVERAGE	19.8%
4	N. Mexico	26.8%	29	Washington	19.8%
5	New York	25.4%	30	Idaho	19.7%
6	Montana	24.8%	31	Nevada	19.6%
7	Hawaii	24.5%	32	S. Carolina	19.4%
8	Vermont	24.5%	33	Kentucky	19.3%
9	Louisiana	23.2%	34	Nebraska	19.2%
10	Utah	23.2%	35	Arkansas	19.1%
11	Mississippi	23.1%	36	N. Carolina	18.7%
12	N. Dakota	23.1%	37	Iowa	18.6%
13	Minnesota	22.3%	38	Oklahoma	18.5%
14	Oregon	22.6%	39	Tennessee	18.3%
15	Maine	21.8%	40	Pennsylvania	18.2%
16	Massachusetts	21.8%	41	New Jersey	17.8%
17	Delaware	21.5%	42	Illinois	17.6%
18	Rhode Island	21.5%	43	Florida	17.5%
19	S. Dakota	21.5%	44	Virginia	17.5%
20	Wisconsin	21.3%	45	Texas	17.2%
21	Arizona	21.2%	46	Kansas	17.1%
22	W. Virginia	21.0%	47	New Hampshire	16.5%
23	Georgia	20.6%	48	Montana	16.4%
24	Maryland	20.5%	49	Connecticut	16.0%
25	Michigan	20.2%	50	Ohio	16.0%
26	Alabama	20.2%	51	Indiana	14.9%

CHART 1

REVENUES AS PERCENT OF PERSONAL INCOME FOR ALASKA,
5 NEXT HIGHEST STATES, AND LOWEST STATE



44. State petroleum revenues of all kinds (tax and non-tax are also grossly disproportionate on a per capita basis to all the revenues taken in by other state and local governments in the United States. In FY 1981, total revenues for state and local governments in the United States averaged about $1,900 per capita. I estimate, however, that in Alaska, total state and local revenues in FY 1981 were about $11,600 per capita six times the national average. Petroleum revenues just at the state level were over $8,000 per capita four times the national average for *all* state *and* local revenue. Once again, the Alaska figures understate the huge level of Alaskan petroleum revenues because they do not take into account local petroleum revenues.

45. General revenues per capita for state and local governments in Alaska were $8,918 in FY 1980. This was over five times higher than the national average of $1,688. As shown in Table 5 and Chart 2, the other states ranged from a low of $1,252 per capita in Indiana to a high of $2,712 in Wyoming. Thus, expressed in per capita terms, Alaska again had over three times the state and local revenues of the next highest state.

3. *Alaska's petroleum taxes are excessive compared to the taxes imposed by similar states.*

46. Large states with low populations might be expected to have higher revenue needs both per capita and also relative to personal income. These factors, however, do not explain the radically high level of state petroleum taxes in Alaska. Alaska's petroleum taxes are disproportionate in comparison not only with the national average for all state and local revenues, but also with the reve-

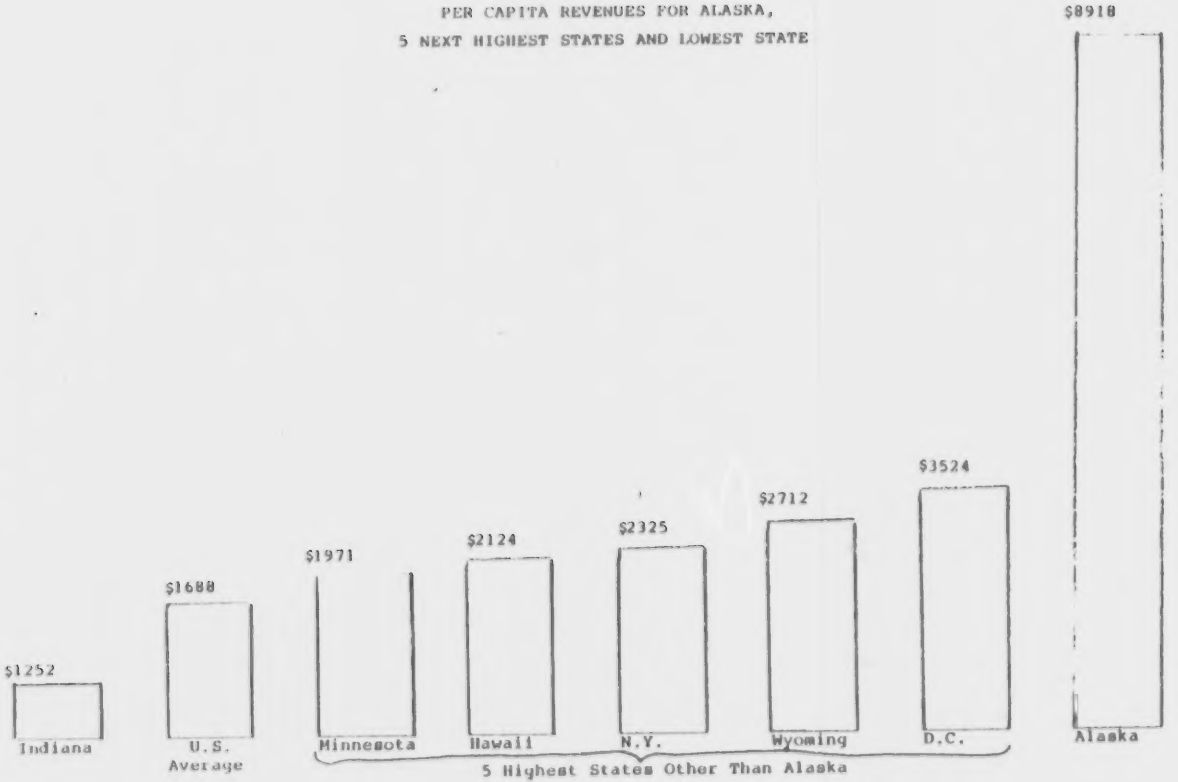
TABLE 5

FY 1980 STATE AND LOCAL PER CAPITA REVENUES

Rank	State	Revenues	Rank	State	Revenues
1	Alaska	$8,918	26	Iowa	$1,629
2	D.C.	$3,524	27	Connecticut	$1,623
3	Wyoming	$2,712	28	Arizona	$1,606
4	New York	$2,325	29	S. Dakota	$1,604
5	Hawaii	$2,124	30	Kansas	$1,581
6	Minnesota	$1,971	31	Utah	$1,564
7	Delaware	$1,962	32	Pennsylvania	$1,542
8	Massachusetts	$1,952	33	Oklahoma	$1,505
9	California	$1,944	34	Maine	$1,493
10	Oregon	$1,942	35	W. Virginia	$1,488
11	New Mexico	$1,934	36	Georgia	$1,469
12	N. Dakota	$1,913	37	Virginia	$1,460
13	Montana	$1,907	38	Idaho	$1,432
14	Michigan	$1,888	39	Texas	$1,425
15	Maryland	$1,881	40	Ohio	$1,386
16	Nevada	$1,814	41	Kentucky	$1,375
17	Wisconsin	$1,809	42	Mississippi	$1,374
18	Washington	$1,798	43	Alabama	$1,364
19	Rhode Island	$1,791	44	Florida	$1,359
20	Colorado	$1,754	45	Maryland	$1,340
21	Vermont	$1,732	46	New Hampshire	$1,326
22	New Jersey	$1,723	47	N. Carolina	$1,316
23	Illinois	$1,694	48	S. Carolina	$1,284
	AVERAGE	$1,688	49	Tennessee	$1,283
24	Louisiana	$1,678	50	Arkansas	$1,268
25	Nebraska	$1,673	51	Indiana	$1,252

CHART 2

PER CAPITA REVENUES FOR ALASKA,
5 NEXT HIGHEST STATES AND LOWEST STATE



nues of other large, low-population states such as Montana and Wyoming. The large areas, difficult terrains and small populations of these states do appear to call for larger revenues than the national average. Nonetheless, the *total* state and local revenues of Montana and Wyoming in FY 1981 equalled 25% and 30% of personal income respectively — above the national average, but far less than Alaska's 90%. Even when revenues are estimated per capita, the total revenues of Montana and Wyoming were only $2,025 and $2,960 respectively, significantly less than the $5,300 in Alaskan state petroleum taxes alone.

47. Table 6 and Chart 3 show the per capita state and local revenues for Alaska, Montana, Wyoming and the Nation as a whole from FY 1960 to the present. As can be seen, Montana and Wyoming have always had a higher level of per capita revenue than the Nation as a whole and Alaska had generally been even higher. In the last seven years, however, Alaskan state and local revenues have mushroomed, leaving Montana, Wyoming and all other states in the Country far behind.

48. Montana and Wyoming are instructive comparisons in other respects. Neither Wyoming nor Montana is highly developed. Both are major energy producing states. Both have large severance taxes that have been the subject of considerable controversy. Neither state, however, collects as high a level of taxes and other revenue from their principal natural resource industry as does Alaska. Neither state, moreover, has placed the almost exclusive burden of financing the state budget on the back of their natural resource industry.

49. Table 7 shows estimated natural resource revenues for Alaska, Montana and Wyoming in FY 1980 and FY 1981. In both years, natural resource taxes represented

TABLE 6A

NOMINAL PER CAPITA STATE AND LOCAL REVENUES FOR ALASKA, MONTANA, WYOMING AND THE NATION AS A WHOLE

FY	National	Alaska	Montana	Wyoming
1960	$ 280	$ 384	$ 351	$ 470
1961	$ 295	$ 400	$ 355	$ 452
1962	$ 313	$ 557	$ 362	$ 483
1963	$ 333	$ 606	$ 395	$ 537
1964	$ 357	$ 721	$ 429	$ 558
1965	$ 383	$ 848	$ 456	$ 619
1966	$ 424	$ 841	$ 495	$ 673
1967	$ 385	$ 868	$ 430	$ 578
1968	$ 507	$ 1086	$ 564	$ 795
1969	$ 567	$ 1041	$ 584	$ 873
1970	$ 643	$ 4168	$ 682	$ 894
1971	$ 703	$ 1562	$ 743	$ 961
1972	$ 799	$ 1594	$ 862	$1028
1973	$ 906	$ 1632	$ 946	$1090
1974	$ 983	$ 1937	$1013	$1169
1975	$1071	$ 2291	$1126	$1388
1976	$1193	$ 3349	$1292	$1689
1977	$1321	$ 3730	$1414	$1857
1978	$1449	$ 3802	$1559	$2132
1979	$1559	$ 4957	$1661	$2386
1980	$1688	$ 8918	$1907	$2712
1981 (Est.)		$11300		
1982 (Est.)		$11980		

TABLE 6B

REAL PER CAPITA STATE AND LOCAL REVENUES FOR ALASKA, MONTANA, WYOMING AND THE NATION AS A WHOLE

FY	National	Alaska	Montana	Wyoming
1960	$316	$ 433	$395	$ 530
1961	$329	$ 446	$396	$ 505
1962	$345	$ 615	$400	$ 533
1963	$363	$ 661	$431	$ 586
1964	$384	$ 776	$462	$ 600
1965	$405	$ 897	$483	$ 655
1966	$436	$ 865	$509	$ 692
1967	$385	$ 868	$430	$ 578
1968	$486	$1042	$541	$ 763
1969	$516	$ 948	$532	$ 795
1970	$553	$3584	$586	$ 768
1971	$579	$1287	$612	$ 791
1972	$638	$1273	$688	$ 821
1973	$681	$1227	$711	$ 819
1974	$666	$1313	$686	$ 792
1975	$665	$1422	$699	$ 861
1976	$700	$1965	$758	$ 991
1977	$727	$2055	$779	$1023
1978	$741	$1946	$798	$1091
1979	$718	$2285	$765	$1099
1980	$685	$3620	$774	$1101
1981 (Est.)		$4203		
1982 (Est.)		$4203		

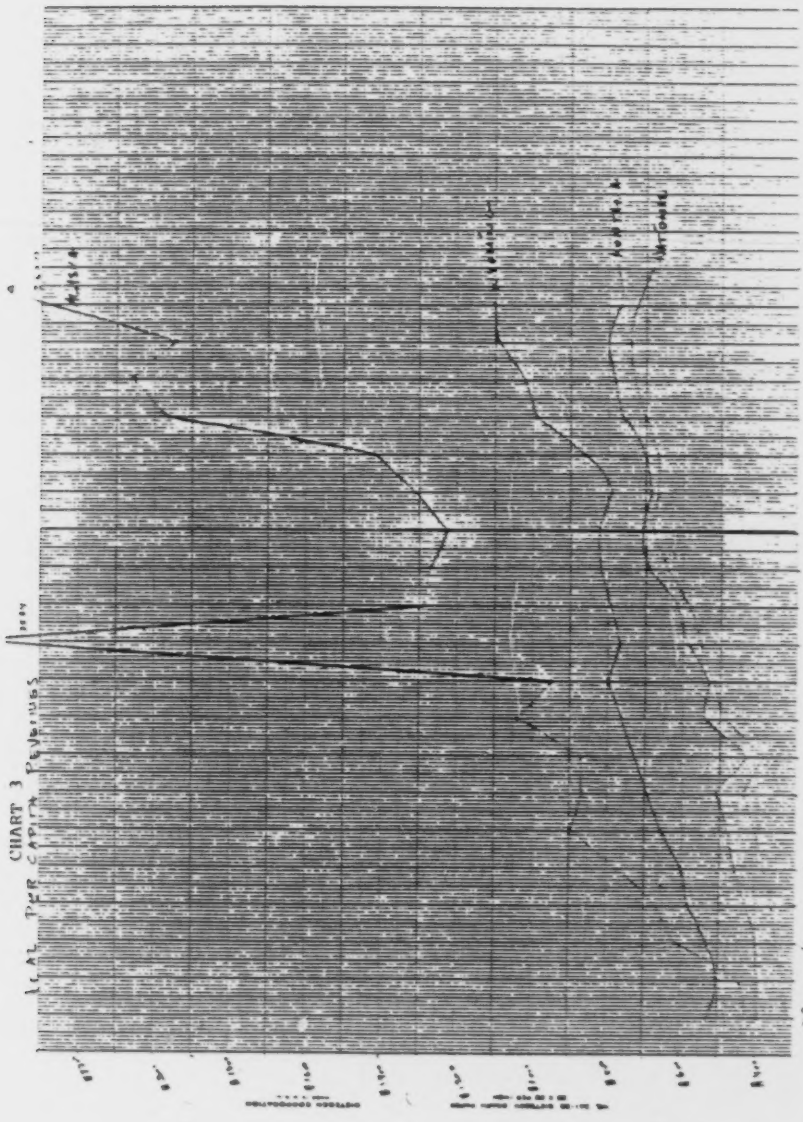


CHART 3

TABLE 7

BURDEN ON NATURAL RESOURCES IN ALASKA, MONTANA AND WYOMING

	Alaska		Montana		Wyoming	
	1980	1981	1980	1981	1980	1981
Severance Taxes	$506	$1,170	$94	$99	$106	$138
Corporate Income Taxes	$574	$860	$46(1)	$53(1)	—	—
Special Property Taxes on Natural Resources	$169	$143	—	—	—	—
Natural Resources Taxes as a Percentage of Total Sales Taxes	87%	94%	32%	33%	27%	29%
Royalties Plus Bonus Leases	$892	$1,139	$29	$34(2)	$32	$42(2)
Total Natural Resource Revenues	$2,141	$3,312	$169	$186	$138	$180
Natural Resource Revenues As a Percentage of State Taxes Plus Royalties	92%	96%	36%	37%	33%	35%

(1) Assumes all corporate taxes collected by state are on natural resources industry

(2) Assumes percentage increase in royalties for the state are the same as percentage increase in severance taxes between 1980 and 1981

NOTE: All dollar figures are in millions

less than a third of the total state taxes in Montana and Wyoming (even using very generous estimates of natural resource taxes). Similarly, total natural resource revenues equalled only about one-third of the total taxes and royalties of those two states. In Alaska, by contrast, natural resource taxes equalled 87% and 95% of total state taxes in FY 1980 and FY 1981, respectively, and natural resource revenues equalled 92% and 96% of total state taxes and royalties for the same years.

IV

THE TREMENDOUS GROWTH IN ALASKA EXPENDITURES

50. The availability of huge petroleum taxes and other petroleum revenue has fueled a dramatic increase in Alaskan state and local expenditures in both nominal and real terms (i.e., adjusted for inflation by the consumer price index). Starting from a relatively low base in FY 1960, real expenditures grew rapidly in the 1960s as a result of large injections of federal aid. Expenditures spurted in the early 1970s following the discovery of Prudhoe Bay and the receipt of large bonus payments. Between FY 1978 (when the Oil Tax Act was adopted) and FY 1981, the State admits that its total expenditures (measured by total general fund appropriations) increased from $1,831.92 per capita to $11,824.79 per capita, a nominal increase of 545% and a real increase of over 350%. I conservatively estimate that direct general expenditures* for state and local governments in Alaska increased from $3,693 per capita to $7,280 per capita, a nominal increase of 97% and a real increase of 43%.

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*Direct general expenditures exclude retirement of debt, investments, extensions of credit, agency transactions, utility expenditures, and insurance-trust expenditures.

During the same period, direct general expenditures in other states fell in real terms as a result of fiscal stringencies and decreases in federal assistance. Table 8 shows the growth in Alaskan expenditures from 1960 to 1982.*

51. Alaskan expenditures for the last several fiscal years have been out of all proportion to the expenditures of the other 49 states in the Union. As with revenues, the total direct general expenditures of state and local governments have averaged about 20% of personal income in recent years. I estimate that in FY 1981, by contrast, direct general expenditures by Alaskan state and local governments totaled $3.0 billion or about 55% of personal income — almost three times the national average. In FY 1982, I estimate that Alaskan expenditures rose even further to about 61% of personal income.

52. Table 10 and Chart 5 show direct general expenditures relative to personal income for all state and local governments in FY 1980. Excluding Alaska, expenditures ranged from 14.8% of personal income in Indiana to 24.6% in Wyoming. Alaskan expenditures were 54.9%, almost three times the national average of 19% and more than double that of the next highest state, Wyoming.

53. Alaskan expenditures are also higher than the national average by several magnitudes when looked at on a per capita basis. I very conservatively estimate that in

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*Table 9 and Chart 4 show the increase in per capita Alaskan state and local expenditures in comparison to the average per capita expenditures in other states during this time period and the per capita expenditures of Montana and Wyoming.

TABLE 8

ALASKAN STATE AND LOCAL PER CAPITA EXPENDITURES FROM FY 1960 TO TODAY

FY	Total State Expenditures(1)	Nominal Direct General Expenditures	Real Direct General Expenditures
1960		$ 345	$ 388
1961		$ 458	$ 511
1962		$ 551	$ 608
1963		$ 670	$ 731
1964		$ 805	$ 867
1965		$ 928	$ 982
1966		$ 923	$ 949
1967		$1,191	$1,191
1968	$ 457	$1,203	$1,154
1969	$ 487	$1,216	$1,107
1970	$ 968	$1,350	$1,161
1971	$ 945	$1,828	$1,506
1972	$ 964	$2,147	$1,715
1973	$ 1,093	$2,376	$1,786
1974	$ 1,088	$2,501	$1,695
1975	$ 1,011	$2,782	$1,727
1976	$ 1,348	$3,079	$1,807
1977	$ 1,584	$3,275	$1,804
1978	$ 1,832	$3,693	$1,890
1979	$ 2,074	$4,577	$2,110
1980	$ 2,825	$6,257	$2,540
1981	$11,825	$7,280 Est.	$2,708 Est.
1982		$8,830 Est.	$3,100 Est.

(1) *See* Defendants' Response to Interrogatory No. 58.

TABLE 9A

NOMINAL PER CAPITA STATE AND LOCAL EXPENDITURES FOR ALASKA, MONTANA, WYOMING AND THE NATION AS A WHOLE

Fy	National	Alaska	Montana	Wyoming
1960	$ 288	$ 345	$ 334	$ 454
1961	$ 307	$ 458	$ 355	$ 461
1962	$ 321	$ 551	$ 350	$ 491
1963	$ 343	$ 670	$ 400	$ 506
1964	$ 362	$ 805	$ 427	$ 531
1965	$ 386	$ 928	$ 463	$ 611
1966	$ 423	$ 923	$ 492	$ 697
1967	$ 472	$1,191	$ 510	$ 740
1968	$ 512	$1,203	$ 553	$ 809
1969	$ 578	$1,216	$ 580	$ 948
1970	$ 646	$1,350	$ 675	$ 876
1971	$ 731	$1,828	$ 754	$ 940
1972	$ 801	$2,147	$ 816	$1,068
1973	$ 863	$2,376	$ 887	$1,085
1974	$ 940	$2,501	$ 899	$1,107
1975	$1,077	$2,782	$1,079	$1,371
1976	$1,191	$3,079	$1,260	$1,621
1977	$1,262	$3,275	$1,409	$1,572
1978	$1,355	$3,693	$1,515	$1,776
1979	$1,481	$4,577	$1,596	$1,981
1980	$1,622	$6,257	$1,769	$2,335
1981 (Est.)	$1,780	$7,280		
1982 (Est.)		$8,830		

TABLE 9B

REAL PER CAPITA STATE AND LOCAL EXPENDITURES FOR ALASKA, MONTANA, WYOMING AND THE NATION AS A WHOLE

FY	National	Alaska	Montana	Wyoming
1960	$ 324	$ 388	$ 376	$ 511
1961	$ 342	$ 511	$ 397	$ 514
1962	$ 354	$ 608	$ 387	$ 542
1963	$ 374	$ 731	$ 436	$ 552
1964	$ 389	$ 867	$ 460	$ 571
1965	$ 409	$ 982	$ 490	$ 647
1966	$ 435	$ 949	$ 506	$ 717
1967	$ 472	$1,191	$ 510	$ 740
1968	$ 491	$1,154	$ 530	$ 776
1969	$ 526	$1,107	$ 528	$ 863
1970	$ 555	$1,161	$ 580	$ 753
1971	$ 602	$1,506	$ 621	$ 774
1972	$ 640	$1,715	$ 652	$ 853
1973	$ 649	$1,786	$ 667	$ 815
1974	$ 637	$1,695	$ 609	$ 750
1975	$ 668	$1,727	$ 670	$ 851
1976	$ 699	$1,807	$ 739	$ 951
1977	$ 695	$1,804	$ 776	$ 866
1978	$ 693	$1,890	$ 775	$ 909
1979	$ 682	$2,110	$ 735	$ 913
1980	$ 658	$2,540	$ 718	$ 948
1981 (Est.)		$2,708		
1982 (Est.)		$3,100		

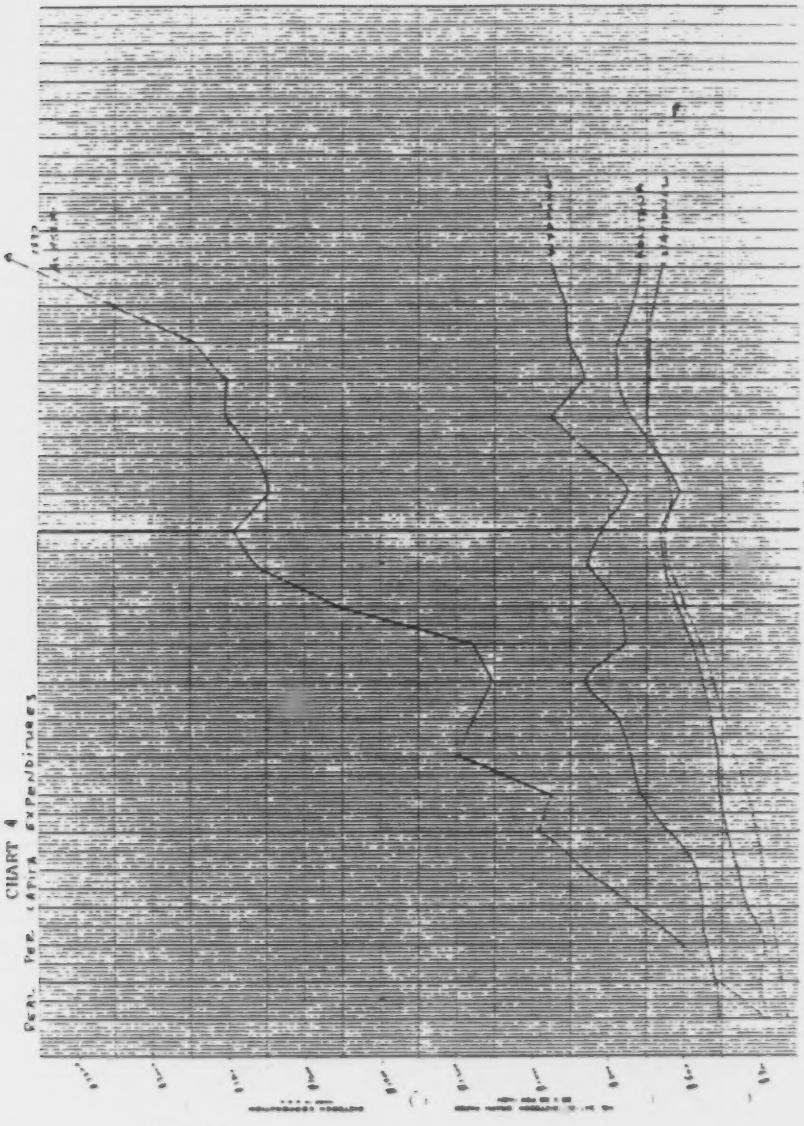


CHART 4

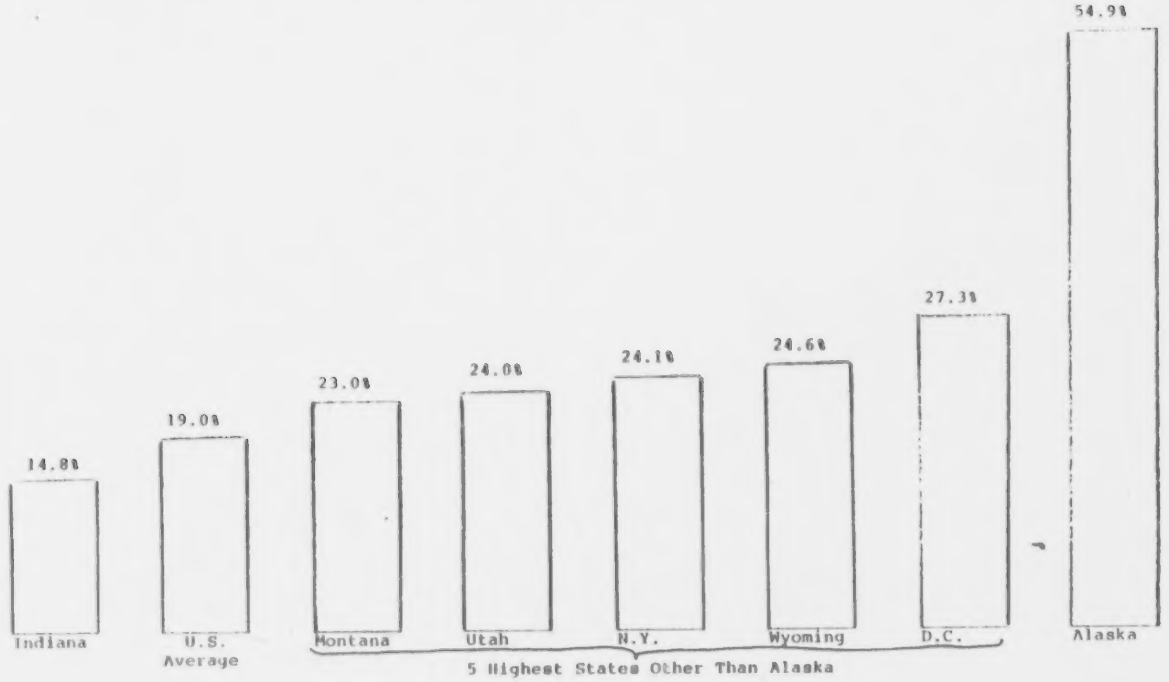
TABLE 10

FY 1980 STATE AND LOCAL EXPENDITURES
AS A PERCENTAGE OF STATE PERSONAL INCOME

Rank	State	Percent	Rank	State	Percent
1	Alaska	54.9%	27	Alabama	19.7%
2	D.C	27.3%	28	Washington	19.6%
3	Wyoming	24.6%	29	Iowa	19.3%
4	New York	24.1%	30	Georgia	19.1%
5	Utah	24.0%	31	S. Carolina	19.1%
6	Montana	23.0%	32	California	19.0%
7	New Mexico	23.0%		AVERAGE	19.0%
8	Mississippi	22.7%	33	Idaho	18.8%
9	Vermont	22.6%	34	N. Carolina	18.5%
10	Hawaii	22.5%	35	Tennessee	18.4%
11	N. Dakota	22.2%	36	Arkansas	18.1%
12	Oregon	22.1%	37	Colorado	18.0%
13	Louisiana	21.5%	38	Nebraska	17.7%
14	Minnesota	21.5%	39	Pennsylvania	17.4%
15	W. Virginia	21.4%	40	New Jersey	17.4%
16	S. Dakota	21.3%	41	Virginia	17.3%
17	Wisconsin	21.1%	42	Oklahoma	17.3%
18	Rhode Island	21.0%	43	Kansas	17.1%
19	Kentucky	20.7%	44	Florida	16.8%
20	Maine	20.5%	45	New Hampshire	16.7%
21	Arizona	20.4%	46	Texas	16.5%
22	Nevada	20.2%	47	Ohio	16.5%
23	Massachusetts	20.1%	48	Illinois	16.5%
24	Michigan	20.1%	49	Montana	15.7%
25	Maryland	19.8%	50	Connecticut	15.6%
26	Delaware	19.8%	51	Indiana	14.8%

CHART 5

EXPENDITURES AS PERCENT OF PERSONAL INCOME
FOR ALASKA, 5 NEXT HIGHEST STATES, AND LOWEST STATE



FY 1981, direct general expenditures by Alaskan state and local governments were $7,280 per capita — over four times the national average of $1,780.* I estimate that Alaskan expenditures rose to $8,830 per capita in FY 1982.

54. Per capita expenditures in FY 1980 ranged from a low of $1,200 in Arkansas to a high of $2,330 in Wyoming, excluding Alaska. Alaskan direct general expenditures were $6,257 per capita, almost four times the national average and almost three times the per capita expenditures of the second highest state, Wyoming. The figures are shown in Table 11 and Chart 6.

55. The enormous size of Alaska's expenditures on a per capita basis can be shown by comparing Alaskan state expenditures with the expenditures of the United States federal government. Federal spending (which, of course, includes defense spending and social security) currently totals about $3,000 per person. The Alaskan state government, by contrast, currently spends over $7,000 per person — over twice the federal amount. Most states, as previously noted, spend less than $2,000 per person — considerably less than the federal amount. No state other than Alaska spends more per capita than the federal government.

56. Quite tellingly, only slightly more than half of Alaska's revenues in FY 1981 went to what might be called "traditional state services" — transportation, education, capital projects, etc. Traditional state expendi-

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*The State, in answer to the taxpayer's interrogatories, estimates that total state expenditures in FY 1981 were $11,824.79 per capita. Defendant's Response to Interrogatory No. 58(c).

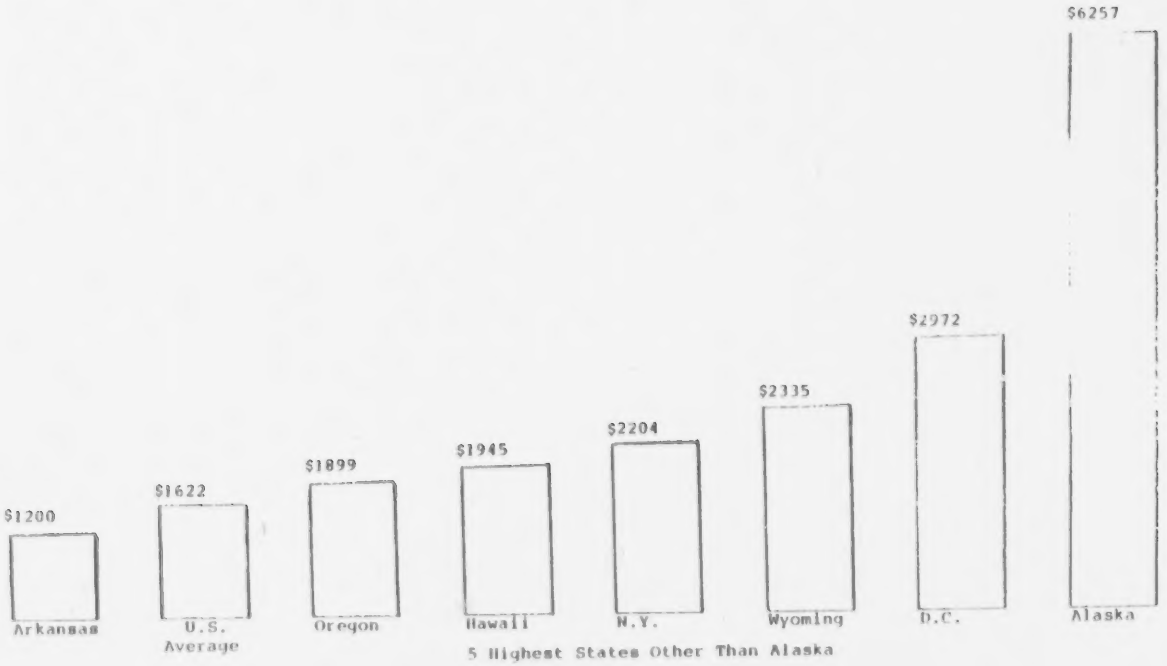
TABLE 11

FY 1980 STATE AND LOCAL PER CAPITA EXPENDITURES

Rank	State	Expenditure	Rank	State	Expenditure
1	ALASKA	$6,257	26	S. Dakota	$1,586
2	D.C.	$2,972	27	Connecticut	$1,583
3	Wyoming	$2,335	28	Colorado	$1,578
4	New York	$2,204	29	Louisiana	$1,560
5	Hawaii	$1,945	30	Arizona	$1,547
6	Oregon	$1,899	31	Nebraska	$1,544
7	Minnesota	$1,894	32	W. Virginia	$1,521
8	Michigan	$1,880	33	Kentucky	$1,477
9	Nevada	$1,867	34	Pennsylvania	$1,469
10	N. Dakota	$1,840	35	Virginia	$1,440
11	California	$1,834	36	Ohio	$1,431
12	Delaware	$1,809	37	Oklahoma	$1,406
13	Maryland	$1,809	38	Maine	$1,405
14	Wisconsin	$1,799	39	Georgia	$1,366
15	Massachusetts	$1,796	40	Idaho	$1,366
16	Washington	$1,782	41	Texas	$1,362
17	Montana	$1,769	42	Mississippi	$1,354
18	Rhode Island	$1,754	43	New Hampshire	$1,340
19	New Jersey	$1,688	44	Alabama	$1,326
20	Iowa	$1,686	45	Florida	$1,309
21	New Mexico	$1,658	46	N. Carolina	$1,301
	AVERAGE	$1,622	47	Tennessee	$1,291
22	Utah	$1,615	48	Montana	$1,280
23	Vermont	$1,600	49	S. Carolina	$1,269
24	Illinois	$1,587	50	Indiana	$1,243
25	Kansas	$1,586	51	Arkansas	$1,200

CHART 6

PER CAPITA EXPENITURES FOR ALASKA,
5 NEXT HIGHEST STATES AND LOWEST STATE



tures for FY 1981 totaled only about $2 billion. These services could have been funded through the State's royalties ($1.1 billion) and severance taxes ($1.2 billion) alone. Both the Oil Tax Act and the pipeline property tax could have been abolished without endangering these services. The other $2.5 billion plus of revenues in FY 1981 went largely to increasing the Alaska Permanent Fund, refunding personal income taxes, and expending and subsidizing state loan programs.

57. The Alaska Permanent fund was created in 1976. The Alaskan constitutional amendment creating the Fund provides that at least 25% of mineral rentals, royalties, royalty-sale proceeds, federal mineral revenue-sharing payments, and bonuses received by the State shall be placed in the Fund and invested. In Fy 1981, moreover, the Legislature transferred $900 million in unrestricted revenues to the Permanent Fund. The Permanent Fund has grown from $139 million on June 30, 1979 to $3.15 billion as of March 31, 1982 — or approximately $7,500 per capita.

58. As previously mentioned, in 1980 Alaska abolished the state personal income tax. But Alaska went further and also chose to refund all the personal income taxes paid since January 1, 1979. The State estimates that a total of over $180 million will ultimately be paid cut of current revenues to refund those taxes.

59. Although Alaska has abolished the personal income tax, the State continues to give individuals "tax credits" for political campaign contributions and child care expenses. Alaska thus has set up a form of "negative income tax" where no individual pays income taxes to the State and the State actually gives money to some individuals because of the political contributions they made or the child care expenses they incurred. Alaska estimates

that it will pay over $1.5 million in such "tax credits" to its residents in FY 1982 and almost twice that amount in FY 1983.

60. Recently, the Alaska legislature has even provided for a "dividend" to Alaskan residents. $1,000 in state revenues will be paid this year to each man, woman and child in Alaska. These "dividends" — which will total over 400 million dollars — cannot in any sense be considered refunds of past taxes. They will be paid out of earnings on the Permanent Fund, which in turn is made up of revenues collected from the petroleum industry. Sizeable sums will also be paid under this program to state residents in each future year, although the State does not expect the yearly sum to approach the amount that will be paid out this year.

61. In addition to providing very high levels of direct benefits to its residents, Alaska also uses petroleum revenues to provide a variety of subsidized loan programs to its residents. The largest of these, administered by the Alaska Housing Finance Corporation (a public corporation), provides subsidized loans for owner-occupied homes. The current interest rate for these subsidized loans is 12.5% while the current conventional mortgage rate on new loans in the lower 48 states averages around 16.5%. So Alaska subsidizes home loans in Alaska by about 25%. Other subsidized loan programs include loans to farming, fishing and tourism. For FY 1982, the total loan authorization in the Alaskan capital budget totalled almost half a billion dollars.

V.

ECONOMIC EFFECTS OF EXCESSIVE ALASKAN PETROLEUM TAXES

62. Alaska's imposition of disproportionate taxes on the petroleum industry can have at least three economically adverse effects: First, the taxes can lead to decreased investment in existing Alaskan petroleum fields. Second, the taxes can lead to waste in Alaskan public expenditures. Finally, the taxes can create an economically unwarranted immigration of labor and capital into Alaska from other areas of the country.

A. *Decrease in Valuable Investment*

63. Alaska's taxes on the petroleum industry clearly reduce the rate of return on petroleum produced in Alaska. As a result, investment in existing petroleum fields will be discouraged. Some marginal fields may not be developed and large fields like Prudhoe Bay may be shut down before they otherwise would be.

64. The development of certain portions of Alaska's petroleum reserves will depend, not only on technical factors, but on the State's tax policies. Tax considerations are especially important for areas such as the Ugnu zone, on the North Slope, where a new high cost technology will have to be developed to recover the heavy oil from the shallow sand formations.

65. The development of all known domestic reserves is important for economic and strategic reasons. Increased domestic production puts downward pressure on world oil prices by decreasing imports. Furthermore, recent hostilities in the Middle East have increased the uncertainty of oil supplies from that region. Iran and Iraq are at war with one another. Saudi Arabia, the principal supplier of

oil, is vulnerable to military attack and terrorism, and may voluntarily curtain oil supplies for political reasons as it has in the past. Present world supplies are adequate to meet current world demands. But increased Alaskan production would help shield the United States from the price increases and production slowdowns that may accompany possible future supply interruptions in the Middle East.

66. Because imported oil is subject to disruption, the "true" cost of this oil is higher than its nominal price. Domestically produced oil should be encouraged because of its greater security. Instead, the high Alaskan petroleum taxes discourage production from existing fields in Alaska, a result contrary to the national interest.

B. *The Potential for Waste*

67. When public expenditures are financed by taxes on local residents, legislatures are constrained from wasting money. In order to increase spending, the legislature must take the politically uncomfortable step of imposing additional taxes on its residents. Before increasing such taxes, the legislature will look carefully to see whether the increased governmental spending is really necessary.

68. If the Alaska legislature is free to finance additional public services by imposing higher taxes on the oil industry, on the other hand, public expenditures may well be pushed beyond the level where the added benefit of the expenditures equals or exceeds the added cost. The result will be "waste" and a decline in the total output of the economy.

C. *Migration Inefficiency*

69. If a state government has a fiscal advantage over other states because of natural resources within its

boundaries, and if it exploits those advantages like Alaska does, significant benefits will be bestowed on its residents. As in Alaska, personal taxes may be reduced or abolished. As in Alaska, a very high level of public services may be provided. As in Alaska, even direct cash payments may be made to local residents. Benefits such as these will provide an incentive for immigration of both labor and capital from the rest of the country, an immigration that will be unrelated either to greater productivity in the state or to desirable living characteristics of the state. Such artificially stimulated immigration of labor and capital, in short, would be economically inefficient.

VI.

CONCLUSION

70. Both relative to personal income and on a per capita basis, Alaskan revenues and expenditures are enormous relative to the revenues and expenditures of other states and are unprecedented in U.S. fiscal experience. Also unprecedented is the very large share of the total state revenues that is provided by a single industry. As noted above, 95% of the revenues comes from the petroleum industry. The exorbitant size of Alaska's petroleum revenues is explained in part by the fact that Alaska owns much of the petroleum reserves in Alaska and receives royalties on those holdings. But this does not explain the size of the State's petroleum taxes. Instead, the taxes are best explained by the lack of strong political and economic constraints on the imposition of such taxes. As a result, constitutional limits on Alaskan tax policy are all the more important.

Further affiant sayeth not.

/s/ Peter Mieszkowski
Peter Mieszkowski

Subscribed and sworn to before me this 28th day of July, 1982.

/s/ Esther M. Alvarado
Notary Public in and for
the County of
Harris, Texas

My commission expires
7/25/85

[Curriculum vitae omitted]

F. AFFIDAVIT OF WILLIAM J. BAUMOL

STATE OF NEW YORK }
COUNTY OF NEW YORK } ss.

WILLIAM J. BAUMOL, being first duly sworn, deposes and says:

1. My name is William J. Baumol. I am Professor of Economics at Princeton University and at New York University. I received my degree of Bachelor of Social Science from the College of the City of New York in 1942, and my Ph.D. from the University of London in 1949.

2. I have been President of the American Economic Association, the Association of Environmental and Resource Economists, and the Eastern Economic Association. Over the years. I have served as advisor to a substantial number of firms in a variety of industries as well as to a number of government agencies. For some years, I was Chairman of the Council of Economic Advisors to the Governor of New Jersey; the Council dealt with tax matters, among other issues.

3. I am the author of more than a dozen books with translations into as many languages. Most of those books deal with the behavior of firms and industries, with their costs, revenues and prices, and with taxation. My vita is appended to this affidavit as Appendix I.

4. I have been asked to examine the economic issues raised by the change in Alaska's taxation of petroleum corporations which occurred in 1978 under the Oil and Gas Corporate Income Tax Act (the "Oil Tax Act"). I was supplied with a variety of materials offering me information relating to the Oil Tax Act, the oil industry in Alaska, and this litigation.

5. The conclusions I offer here are my best professional judgment relying on my experience and utilizing materials reasonably relied upon by persons in my field. Indeed, the conclusions are based upon a well developed and well recognized body of economic literature dealing with the costs and revenues of firms, with tax policy and its consequences for economic efficiency, and with the distribution of tax burdens. For these reasons the conclusions are of general applicability and are firmly based upon recognized analytic methods.

I. *Summary of Conclusions*

6. On the basis of the materials that have been provided to me, the economic literature that has just been described, and my own analysis of the issues, I have reached the following conclusions:

(a) The Oil Tax Act imposes a tax on all of the profit earned or imputed from the sale or other disposition of crude oil produced in Alaska even though such income is generated by activities in a variety of states. Consequently, the Act taxes income generated beyond the borders of Alaska.

(b) As a result, the Act makes such income vulnerable to duplicative taxation.

(c) The Act consequently discriminates against firms whose activities, by their nature, must span several states, and in favor of enterprises which operate exclusively within the State of Alaska.

(d) In addition to its inherent unfairness, the Oil Tax Act is likely to have a number of deleterious consequences for our Nation's economy. In particular, it may well discourage economically desirable investment in Alaska; and, if it is taken as a prece-

dent valid throughout the United States, it may well discourage investment throughout the economy.

II. *The Problems of Income Attribution*

7. Whenever a state proposes to tax the profits of a company which does business in several different states, it is necessary to determine what proportion of the company's profits is properly attributable to that state and is therefore legitimately subject to taxation by it.

8. The problem is a complicated one when the company's domestic operations are so highly integrated that activities in some states contribute to the net income derived from activities in other states. In such a case, it may be inherently impossible on any firm economic grounds to attribute any particular portion of the firm's profits to any one given state. When activities in States B and C enhance the profitability of operations in State A, it may be inherently unclear exactly how much of the profit is properly attributable to State A alone. What is clear in such a case, and what Alaska has chosen to ignore, is that *some* of that profit is attributable to States B and C.

III. *The Difficulties of Attributing Income Directly*

A. *The Hypothetical Subentity Approach*

9. One method of dealing with the problem which has sometimes been attempted is the hypothetical bifurcation of a company into two artificial enterprises, one encompassing operations within the taxing state, the other encompassing all the out-of-state operations of the company. Each subentity is assumed to have its own accounts, and an attempt is made to calculate a separate profit figure for each subentity. The profit derived in this way for the hypothetical subentity operating within the taxing state is taken to be the portion of the entire company's profit that is attributable to the taxing state.

B. *Difficulties in the Hypothetical Subentity Approach*

10. The hypothetical subentity approach to dividing up the income of a multistate enterprise among the states in which it operates (as we may perhaps label this general procedure) can in fact work well in certain special circumstances. When the company whose profit is to be divided up among states consists of essentially independent divisions, each of which confines its activities to a single state and none of which contributes materially to the operations of the others, then the activities of the firm are relatively easily and naturally divisible, and the attempt to separate the firm into two artificial subentities need involve no serious distortion of reality.

11. On the other hand, when the firm in question is highly integrated, when different activities of the firm are inextricably interrelated, when many activities in different states simultaneously add to the profitability of the firm's products, then any such attempt to attribute correctly the company's profits directly to individual states is doomed to failure. This problem clearly arises in the case of the oil companies in question. Research conducted in Ohio, crude oil marketing know-how acquired in Louisiana and drilling and reservoir engineering experience gathered in Oklahoma all contribute to the profit generated by the Alaskan crude oil.

12. Where a firm's activities in different geographic locations are so highly interrelated, it *may* be possible to attribute directly *some* portion of the firm's total profit to particular activities and the locations where they occur. But direct attribution of this sort will be difficult. Take the income generated by Alaskan crude oil. It is extremely difficult, if not impossible, to determine the amount of that income correctly attributable to the proprietary computer models used to maximize oil recovery at Prudhoe Bay, for example, or to the successful efforts

of research units of the taxpayers in the Lower 48 in overcoming special problems of Arctic production.

13. Furthermore, if this direct attribution process is conducted on any basis which is economically defensible, after each location has been assigned whatever amount of profit can be claimed for it, there will also remain a pool of the firm's profits that is attributable to activities at many locations and is inherently unassignable to individual states. The amount of this unattributable pool may well be a substantial portion of the net profits of the firm. The reason for this is to be found in what are referred to as economies of scale and scope.

14. In many industries, technology dictates that more sizeable firms can provide their outputs more efficiently than smaller ones. Such a firm typically benefits from *economies of scale*, meaning that, say, a doubling of the firm's output level brings about less than a doubling of the firm's outlays — i.e., costs do not increase proportionateiy with scale of operation. Where such economies are substantial, a very considerable portion of a multistate firm's net earnings is attributable to a multiplicity of activities and not to any particular units of the company.

15. Even more to the point here, a large and unattributable pool of net earnings will also result from a phenomenon which has recently come to be called *economies of scope*. An enterprise which encompasses a variety of activities in a variety of geographic locations may be able to provide each of those activities more cheaply than if each were provided by an independent specialized firm. A firm which extracts oil in Alaska, transports it to and refines it in California, and markets the products in Arizona, for example, can carry out the entire operation more cheaply than if each of the activities were carried out by a different specialized enterprise. Such a firm also benefits from the offsetting risks of its different activities

which improve its standing in the economy's capital markets and permit it to obtain funds at a cost lower than that of a smaller specialized enterprise. In short, the profit-generating capacity of each portion of the firm is enhanced by the activities of the other portions of the enterprise. As a result, part of the company's total earnings cannot be credited to any particular state.

16. The relationship can be made more concrete by an illustration involving a company with two divisions each of which is the direct recipient of revenues whose magnitude is easily ascertained. For this purpose, consider a manufacturer of cars and trucks. Suppose two independent specialized firms could each earn a rate of return of X% on its capital. However, our manufacturer of *both* cars and trucks benefits from economies of scope which assume a particularly simple form: with an investment outlay equal to ¾ths of the combined investments of the two specialized firms, this manufacturer can produce the same output of cars and trucks as the two specialized firms. It follows that, if all other things were equal, the integrated firm would enjoy a rate of return equal to 4/3X — for it would earn as many dollars as the specialized firms together, with a ¼th smaller investment outlay. This simple form of scope economies increases net revenues per dollar of investment by one third, with all of this increment clearly attributable to the integrated nature of the firm and not to either one of its divisions taken by itself. This sort of income is unattributable to any one division of an integrated firm or to activities that occur exclusively within the boundaries of any one state.

17. In sum, for a multistate enterprise which is highly integrated and which benefits from economies of scale and scope, the hypothetical subentity approach to dividing up income among states is unworkable.

C. *Problems of Inconsistency and Duplicative Taxation*

18. There is a corollary problem which such an approach engenders if it is used by several states. Since there is no way to assure logic to the administration of the hypothetical subentity approach, it invites inconsistency and incompatibility in the different states' arrangements. Each state can be expected to resolve ambiguities in the hypothetical subentity approach by adopting the solution that contributes most to its own taxes. One of the immediate consequences is likely to be duplicative taxation, with a company paying taxes to several states on the same portion of its income. A multi-state firm subject to such taxation will find itself subjected to higher taxation simply as a result of the fact that it crosses state lines.

D. *Summary*

19. In summary, the hypothetical subentity approach to dividing up the income of a multistate enterprise among the several states is unreasonable, is essentially unworkable, and acts as an impediment to interstate commerce when employed for companies, like the taxpayers in this case, that are highly integrated and enjoy economies of scale and scope.

IV. *The Oil Tax Act*

20. In an effort to overcome the attribution problem which I just described, achieve consistency, and avoid duplicative taxation, many states have adopted a three-factor apportionment formula endorsed both by the Uniform Division of Income for Tax Purposes Act and the Multi-State Tax Compact. Under this formula, a company's profit is apportioned among the states on the basis of an average of each state's share of the company's sales, tangible property and payroll. Alaska itself adopted this procedure upon entering the Union in 1959.

21. In 1978, however, Alaska abandoned this procedure as far as a portion of the petroleum industry was concerned by enacting the Oil Tax Act. Under that Act, Alaska abandoned its reasonable apportionment approach to the division of income. In its place, Alaska adopted a simplistic approach best described by the term *exclusive allocation.* In effect, "exclusive allocation" purports to solve the income attribution problem by fiat, declaring that all of the profit from the sale or other disposition of Alaskan crude as calculated by the Act ("the profit from the disposition of Alaskan crude") will henceforth be attributed to Alaska.*

22. In substance, exclusive allocation is an extreme variant of the hypothetical subentity approach. Exclusive allocation, like the hypothetical subentity approach, divides oil-producing or transporting firms into two artificial parts, one operating entirely within the State and the other encompassing all of the remaining operations of the oil company in question. But exclusive allocation indefensibly goes a step further. Alaska appears to recognize that some of the activities of the second hypothetical entity — the one operating outside Alaska — contribute to the successful production and disposition of Alaskan crude, since the Act allows the oil company to deduct some of the costs of these activities in computing its income under the Act. But Alaska's system of exclusive allocation assumes that the second hypothetical entity undertakes these activities on a purely non-profit basis. And it entirely ignores other non-Alaskan activities of the companies that contribute to the successful production and disposition of Alaskan crude. All of the profits from the disposition of

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*Effective in 1982, Alaska repealed the Oil Tax Act and enacted a form of modified apportionment. In this affidavit, however, I shall refer to both the Oil Tax Act and the exclusive allocation system employed by the Act in the present tense.

Alaskan crude are attributed to Alaska and none to the myriad of activities outside of Alaska that contribute to the profits.

23. Alaska's exclusive allocation procedure, then, suffers from infirmities going well beyond those of the hypothetical subentity approach. By assigning to Alaska all of the profit from the sale or other disposition of Alaskan crude — even profit properly attributable to out-of-state activities — exclusive allocation not only engages in a profit assignment procedure with no basis in logic, but also one which is inherently biased toward overassignment of profit toward Alaska.

V. *The Deficiencies of Exclusive Allocation*

24. As elaborated below, a number of firm conclusions can be drawn about the consequences of Alaska's system of exclusive allocation:

(a) By any defensible criterion, the procedure attributes to Alaska too great a proportion of the profit of the oil companies. The amount of this overattribution cannot be exactly measured but may well be extremely large.

(b) In fact, Alaska's exclusive allocation procedure taxes all of the profits derived from the disposition of Alaskan crude even though parts of those profits are properly attributable to the oil companies' activities in other states.

(c) As a result, exclusive allocation discriminates against companies which are engaged in interstate commerce vis-a-vis enterprises operating exclusively within the State of Alaska. It thereby discriminates against investment in interstate enterprises and leads to misallocation of resources between the two types of firms.

A. *Alaska Taxes Income Attributable to Other States*

25. Overattribution of the income of the oil companies to their activities in Alaska follows directly from Alaska's taxation of 100% of what the Oil Tax Act calls "taxable production income". This is defined as the gross revenue from the sale or other disposition of Alaskan crude minus deductions for transportation costs to the point of sale or other disposition, royalties paid, production taxes paid, *ad valorem* taxes paid, direct operating expenses within Alaska, exploration and development costs within Alaska, and an allowance for interest, overhead and administration.

26. It should be noted that the Oil Tax Act does *not* completely ignore the activities of the oil companies outside Alaska that contribute to the profitable disposition of Alaskan crude. Alaska recognizes that *some* non-Alaskan activities are necessary for the successful production and disposition of the oil. But, as already noted, Alaska treats those activities only as costs. Alaska allows for no profit at all on those activities. Yet, it is clear that any independent company which operated at arm's length *vis-a-vis* an Alaskan entity would be unwilling to provide such services without at least an adequate rate of return on its outlays. That is, in no free market would such services be evaluated merely at cost; rather, such a market evaluation would always include at least a full and normal return on the required expenditures.

27. As explained in the taxpayers' affidavits describing their operations, crude marketing activities in various locations outside Alaska including Cleveland, Houston, and Los Angeles; management and accounting services provided in California, New York, Ohio, Oklahoma, Texas and other Lower 48 states; design engineering performed in the Lower 48; reservoir engineering in the Lower 48 states; geologic engineering and analysis conducted

outside Alaska; a multitude of computer programs written and operated in the Lower 48 states; research and development activities in various locations outside Alaska; and many other activities and services in the Lower 48 states all make essential contributions to what Alaska narrowly labels "taxable production income." Appendix II is just a partial listing of the taxpayers' activities in the Lower 48 states that the taxpayers' affidavits show to contribute to this income. Although a part of the income is attributable to each of these activities, the Oil Tax Act evaluates these activities at most at their costs and allocates all of the income to itself.

28. But the failure to recognize that an adequate profit is attributable to these activities is only one of the key issues. Equally crucial for this analysis is the fact that the Oil Tax Act ignores the vital contributions to the income from Alaskan crude provided by the integrated character of the oil companies and the economies of scale and scope that this integration offers.

29. The crude oil marketing know-how of the oil companies, for example, can constitute an intangible asset of considerable significance to the disposition of Alaskan crude. The taxpayers' affidavits discuss how the marketing ability of an oil company is enhanced by the cross-fertilization and constant interaction among its production, refining, transportation and marketing divisions. Patents held by these companies and used by them in dealing with Alaskan oil must also be considered assets to which some portion of the profit from the product is attributable. As I have already pointed out, the multiplicity and scale of the firms' activities reduce the cost of their capital. Indeed, as discussed in the taxpayers' affidavits, without their Lower 48 activities, neither Arco nor Sohio might have been able to obtain the massive financing necessary to develop Prudhoe Bay.

30. As explained in the Affidavit of Robin Adam, after British Petroleum ("BP") discovered oil at Prudhoe Bay, BP acquired an interest in Sohio because it felt that the integration provided by Sohio's operations in the Lower 48 was indispensable to effective utilization of BP's Alaskan reserves. It is also pertinent to note that, without the existence of markets in states outside Alaska, Alaskan oil would lose virtually all of its value because it is illegal to export the oil.

31. Yet another important example: I understand from the affidavits of the taxpayers that R&D activity directed towards operations outside Alaska has on occasion proven extremely beneficial for the finding or production of Alaskan oil. The profit from the disposition of Alaskan crude oil must be attributed in part to all such activities. The Oil Tax Act, however, ignores their contributions and improperly allocates all of the profit to Alaska.

32. The oil companies' R&D activities are a convenient introduction to a crucial and related point — the role of the oil companies' overall exploration program in any reasonable attribution of costs and revenues. It is inappropriate to treat in isolation, as the Oil Tax Act does, the costs and revenues or exploration activity in Alaska. Rather, in dividing up profit among states, it is necessary to treat an oil company's total exploration program, in Alaska and elsewhere, as a single unified activity, and to recognize that the income from any particular oil discovery must be attributed to the firm's overall exploration activity.

33. Exploration is analogous in this respect to R&D. Outlays on the design of a new type of drilling equipment, which turns out to reduce drilling costs substantially, in Alaska, for example, clearly account for some portion of Alaska's current earnings, as has already been noted. If the final design was preceded by five unsuccessful at-

tempts, it is clear that any proper calculation of the revenue-cost relationship must take into consideration not only the outlays devoted explicitly to the last and successful design, but also the outlays on its predecessors, the experimental designs which were not finally adopted. Indeed, the relevant costs must include more than this. As all economists agree, the costs must also include a *risk premium* to compensate the firm for the risk it bore in the R&D process — the *ex ante* risk that it might fail altogether, and its efforts not provide a usable new drill design.

34. Turning to exploration, imagine an oil exploration company of average success which is one of many such firms competing vigorously with one another; while each such exploration company earns an amount sufficient to keep it in business, it earns no more than the cost of its capital. To make the issues as simple and concrete as possible, let us assume that the exploration firm in question has a 20 percent after-tax cost-of-capital, that the firm is carrying on exploration ventures in a multiplicity of states, that each venture incurs outlays of $10 million, and that past experience indicates that, on average, firms in the industry have discovered oil in one venture out of four. Thus, on average, firms have had to spend $40 million for each discovery.

35. What is the minimum profit (before taxes) that the firm must earn, on average, from a state in which it discovers oil that will enable the firm to stay in business? It is true that the firm will have spent only $10 million within the borders of such a state. But if the firm were to earn no more than $10 million plus a 20 percent return on that money, it would clearly be driven into insolvency. In order to break even, those states in which the firm discovers oil must yield on the average $40 million to cover the costs incurred in the four states in which exploration

activity must occur, on average, before one of them works out, plus $8 million to cover the cost of the capital. Looked at in another way, if earnings (after taxes) prove to be worth $48 million in a typical state in which the firm discovers oil, the firm will just be earning its competitive rate of return.

36. It is clear that the one discovery in four must be considered the product of search activity conducted in *four* states, and not only of the activity conducted in the one state in which fate proves to be kind. It is therefore essential that all exploration costs, including return on the funds laid out on the unsuccessful efforts in the other states, be subtracted from the total earnings on the exploration in the state in which success occurred, before arriving at the profit that properly is subject to taxation as net income by that state.

37. Not even all of this profit is, of course, properly taxable in the state in which the success occurred. Part of this profit must be attributed to any other out-of-state contributions stemming from any integration of the exploration firm. But the basic conclusion at this point is that, in an activity like oil exploration, an appropriate, and normally substantial, portion of the profit in a state in which success occurs must be attributed to those states where there was unsuccessful exploration activity. And this is no less true for a highly integrated oil company which conducts its own exploration than it is for a firm specializing in exploration.

38. Multiple exploration ventures also provide an example of economies of scope. The more extensive the exploration activity of a firm, the less is the risk incurred by its exploration effort. The statistical law of large numbers means that more extensive exploration activity contributes a reduction in the risk cost of exploration. For this reason too, the profit from successful production

is not attributable merely to the state where the production occurs but instead to all states in which exploration is undertaken.

39. All of this is brought home by the fact that states in which exploration activity takes place can and do tax oil company profits whether or not that exploration has been successful. That is, states in which there has been exploration activity that failed to discover oil recognize that such operations constitute part of the firm's profit-producing activity. These states therefore legitimately take the position that these operations entitle them to tax part of the firm's profits — a right explicitly recognized by the Multi-State Tax Compact. And in fact states in which unsuccessful exploration takes place do typically tax a portion of the company's profits. It is absolutely crucial in this connection to note that Alaska itself taxes a portion of the total profits of oil companies that are exploring in Alaska but not producing in Alaska. Surely, Alaska cannot reasonably attribute to itself all of the profits from successful exploration activity within its borders at the same time that it claims the right to tax such profits in other states by virtue of unsuccessful exploration in Alaska.

40. To summarize, in the case of the taxpayers, a myriad of activities outside the State of Alaska make contributions to the profits on the petroleum extracted in Alaska. Appendix II again is just a partial listing of such activities. From all this, one conclusion follows inescapably: Alaska's exclusive allocation process taxes profit properly attributable to activities outside that State. Moreover, that profit may well be substantial. The petroleum extracted in Alaska yields the profit that it does precisely because it is handled by an integrated enterprise. Without the integrated enterprise, the profit would be lower. Yet Alaskan tax policy would be defensible only

if no part of the profit were attributable to integrated operations outside the State.

B. *Duplicative and Discriminatory Taxation*

41. It follows directly from the fact that exclusive allocation subjects to Alaskan taxation profits properly attributable to activities in other states that the Oil Tax Act inherently risks double taxation. Since those other states can legitimately claim the right to tax those same profits, such profits can be taxed twice if Alaska's procedure is permitted to stand: once by the state to which they are properly attributable, and once by Alaska which arrogates to itself the right to tax them via a special process of exclusive allocation. As shown by the taxpayers' affidavits, Alaska's procedure does indeed subject them to multiple taxation of the same profits by a number of different states. And if Alaska's tax procedure is permitted to stand and is treated as a precedent by other states hoping to profit in the same way at the expense of the remainder of the country, the possibilities for duplicative taxation will clearly multiply.

42. If an arrangement involves duplicative taxation of interstate firms' income, it follows that it discriminates between interstate and intrastate firms. Where there is duplication in taxation, a firm is subjected to higher taxes simply because its activity is spread over several states. The intrastate firm will pay its taxes to only one state, while the interstate firm is subject to taxation on the same profits by several states. In essence, duplicative taxation is a penalty for crossing state lines.

43. Such discrimination is clearly indefensible as a matter of equity. In addition, it is a source of inefficiency that is potentially enormous, discouraging operation by large integrated firms in several states even in cases where they happen to be the more efficient suppliers. It is,

in sum, an impediment to interstate commerce and to economic efficiency.

VII. *No Acceptable Version of Alaska's Procedure Is Feasible*

44. Having seen the crucial deficiencies of Alaska's exclusive allocation system, one may well ask whether it is possible by means of some more or less minor modifications to transmute it into a defensible procedure. The answer is that this is not possible. The highly integrated character of the taxpayers' domestic operations makes it virtually impossible to disentangle the profits strictly attributable to Alaska from those ascribable to other states. Alaska, to begin with, would have to determine how much profit is attributable to each of a multitude of activities of the sort listed in Appendix II — a Herculean task.

45. Particular problems are posed by activities that contribute in common to operations of the oil companies both within and outside the State of Alaska. For example, as the taxpayers' affidavits show, the companies have spent considerable time and money in the design of techniques that are useful in analyzing geologic data both from Alaska and from other states. Such common outlays are inherently unattributable to particular operations or states on any rational economic basis. It therefore is impossible to determine how much income from any one operation or state is attributable to the common activity.

46. It also follows from the discussion in Paragraphs 13 through 16 that any attempt to attribute oil company profits to their true sources must inevitably leave a pool of profits not logically ascribable to any one source. There simply exists no firm economic basis for attribution of those revenues, because they are contributed simultane-

ously and jointly by activities at a number of distinct locations.

47. The State admits for purpose of its summary judgment motion that the taxpayers "enjoy economies of scale resulting from centralized management" and also "economies of scale resulting from functional integration," both of which inevitably contribute an unattributable residue of profits as shown in Paragraphs 13 through 16. (Defendant's Amended Response to Request for Admission Nos. 116-117 and 122-125.) As I have already discussed, indivisible contributions to profits can be made by R&D activities directed towards operations outside Alaska and by other intangible common assets, such as know-how, which are difficult to value and impossible to divide up into geographically assignable subportions. Indeed, the very size of an oil company itself facilitates the company's activities in Alaska by increasing the creditworthiness of the enterprise, thereby reducing the cost of the capital it uses in Alaska.

48. In short, even if Alaska were to attempt to correct its overattribution of profits to itself, the State's allocation approach is inherently unworkable in the case of these taxpayers. It can only serve as a license for arbitrary decisions by the State's tax authorities, constantly facilitating the exercise of the tax collector's natural bias toward overvaluation of taxable income. It will also invite at least some degree of duplicative taxation and discrimination against interstate commerce as a result of the virtual impossibility of making its undefinable profit-attribution approach compatible with those of other states. Even if those other states should attempt to use procedures comparable to Alaska's exclusive allocation system, the inherently undefined character of the process precludes any method that can guarantee such compatibility.

49. There does exist a procedure, formula apportionment, which can provide consistency of treatment among the states and thereby minimize the risk of duplicative taxation. An example of this procedure has already been referred to in my discussion of the three-factor apportionment formula to which Alaska previously adhered and still adheres for oil companies engaged exclusively in exploration within Alaska. This formula apportions a firm's income by means of an equally weighted average of sales, payroll and property values in the different states in which the firm operates.

50. Such a formula apportionment approach amounts to a rational and frank acknowledgement that direct attribution of multistate profits on any defensible economic basis is, in general, impossible. It consequently employs a conventional formula which has at least four valuable attributes: (1) it is reasonable; (2) it is likely to incur low administrative costs; (3) it is explicit, so that no one need be in any doubt about the amount of a taxpayer's profit that will be attributed to any particular state; and (4) it is sufficiently straight-forward that the several states can make it completely consistent and compatible with the rules employed by other states, thereby avoiding the danger of duplicative taxation, either deliberate or inadvertent. Alaska's abandonment of the formula apportionment approach and its substitution of exclusive allocation can, therefore, only be viewed as a retrograde step which must constitute an impediment to interstate commerce, to efficiency in the taxation process, and to equity in the apportionment of the tax burden.

51. It should be emphasized that there is no way to assure consistency between an apportionment approach and Alaska's exclusive allocation procedure; the two are incompatible in method and untranslatable into one another. As a result, a hybrid system in which Alaska

employs the one method and virtually all other states employ the other immediately and inherently gives rise to the problems of discrimination and duplication in taxation.

VIII. *Exploitation of the Country to Benefit Alaska*

52. The Oil Tax Act, in short, is economically unjustifiable. The adoption of exclusive allocation by Alaska really amounts to a thinly disguised attempt to benefit its residents at the expense of persons in the remainder of the United States. It penalizes not only out-of-state stockholders of the oil companies, but American taxpayers generally, since the taxes extracted from the oil companies by Alaska are deductible from the firms' taxable federal income.

53. This exploitation process promises to be so successful that it has permitted personal income taxes in the State to be abolished at a time when financial pressures on the other states are mounting. Indeed, Alaska has enacted legislation to give each resident of the State a $1,000 "dividend" in 1982.

54. However, a change in the tax rules after the discovery of oil automatically imposes a penalty upon the government which carries it out. For it puts potential future investors on notice that they are dealing with a government which does not eschew unilateral and *ex post* revision of the terms under which the investment is originally agreed to. This invariably reduces willingness to invest in such an area or, what amounts to the same thing, means that future investors can be expected to demand far higher returns on their money before agreeing to supply funds to an area in which the risk of expropriation hangs over them. It follows that, while in the short run Alaskans will obviously benefit at the expense of other states if Alaska's exclusive allocation procedure is permit-

ted to stand, in the long run even Alaskans may find their gains to have been ephemeral.

IX. *Deleterious Consequences of the Oil Tax Act*

55. The Oil Tax Act is a matter for concern not only because it leads to an inequitable distribution of the tax burden. From the viewpoint of the public interest, its implications for the workings of the economy of Alaska and that of the United States as a whole are at least equally serious. I have already shown how it is apt to discourage future investment in Alaska. But if the tax program of the State is permitted to stand, it is very likely to tempt other states to follow the same path. Like a tariff war or an arms race, a move by one party to its own advantage predictably elicits similar moves by others, each intended to improve its initiator's relative position at the expense of others. An abundance of experience confirms that such a scenario is far from unlikely.

56. In such a race by the states to tax one another's legitimate income sources, no one will win in the end. Instead, what is likely is that productive investment in the United States will be handicapped significantly. Foreign investment resources will be discouraged from entering the U.S., and investment by Americans will be discouraged and will increasingly be diverted elsewhere.

57. This is not a matter of minor importance for the future of the country. We are now engaged in a major battle with the free industrial countries of the world over growth in productivity and, so far, we are losing badly. Our productivity growth rates for the better part of two decades have been half of those of a number of leading European economies and a third of those of several Far Eastern countries. The implications for our competitiveness in export markets, for our competitiveness with imports at home, for our ability to finance improvements

in the quality of life, and for our comparative standard of living must be considered very serious.

58. One of the major handicaps besetting the U.S. economy in this productivity race is the fact that the share of output we devote to investment in productive activities is far lower than that of our leading competitors, most of which devote something like a 50 percent greater proportion of GNP to the purpose than do we. Any action whose effect is to discourage investment in this country is clearly in conflict with the public interest. A taxation procedure which subjects interstate firms to duplicative taxation and makes them vulnerable to unilateral revision of the terms of earlier arrangements with the states must surely have that consequence.

59. In addition, since Alaska's revised tax arrangement imposes a discriminatory handicap upon interstate as against intrastate firms, intrastate enterprises are favored in the nation's productive activities even in those cases in which interstate firms are the more efficient suppliers. Every such source of inefficiency obviously also makes it more difficult for our economy to meet the productivity challenge.

60. In short, the Alaskan tax arrangement is indefensible not only because it is discriminatory and violates the canons of equity in taxation, but because it is in direct conflict with the general national interest and imposes upon the economy impediments to investment and to productive efficiency which the economy can ill afford to bear.

X. *Concluding Comments*

61. Oil company profits substantially greater than those properly attributable to activities within Alaska are taxed by Alaska under the Oil Tax Act. It follows from this main conclusion that Alaska has invited duplicative

taxation of the profits of the oil companies. A corollary is that Alaska's tax policy discriminates in favor of firms which operate entirely within the State as against interstate enterprises.

62. The Oil Tax Act benefits residents of Alaska at the expense of inhabitants of other states. The Alaskan tax arrangement, if upheld, will also serve to impede interstate and foreign commerce, to reduce economic efficiency and to discourage investment in Alaska and, ultimately, in the remainder of the country.

63. The infirmities of Alaska's tax program cannot be remedied by modification in its procedures. Nothing less than a complete reversal of direction toward the policy to which Alaska adhered under the Multi-State Tax Compact offers any assurance of eliminating the deficiencies that have been described here. Such a reversal is clearly called for on grounds of both equity and economic efficiency. It is required for rationality and consistency in the tax programs of the various states. And, by no means least significant, it is called for by the public interest.

Further affiant sayeth not.

/s/ William J. Baumol

William J. Baumol

Subscribed and sworn to before me this 23 day of July, 1982.

/s/ Lawrence Handel

Notary Public in and for the
County of New York, New York

My commission expires March 30, 1983

[Vita omitted]

APPENDIX II

EXAMPLES OF LOWER 48 ACTIVITIES THAT CONTRIBUTE TO INCOME EXCLUSIVELY ATTRIBUTED TO ALASKA

A. *General Corporate Activities*

1. Development and preparation of financial analyses, investment analyses, performance analyses, economic analyses, and forecasts.

2. Long range planning with respect to operating and investment strategies.

3. Planning and development of financial arrangements and procedures, including raising of funds from external sources, analysis of investment proposals and corporate undertakings having financial implications, establishment of banking relations and formulation of banking and cash management procedures, administration of cash receipts and disbursements, and formulation of credit approval and collection guidelines and procedures.

4. Direction of public affairs and conduct of governmental relations at the state, federal and local levels.

5. Promotion of corporate image and goodwill.

6. Provision of general computer services.

7. Provision of corporate and divisional management with appraisals of domestic and international political/economic matters.

8. Provision of legal and tax planning services.

9. Formulation, coordination, and administration of the accounting policies of the taxpayers, and provision of centralized accounting services to operating functions.

10. Reporting of financial results and dissemination of financial and operational data to the investment community.

11. Management of employee and executive compensation and benefits and labor relations.

12. Management of manpower resources, including recruitment, professional employment, training, placement of personnel, and development.

B. *Exploration Activities*

13. Evaluation of oil and gas exploration prospects and geological trends for use in acreage bidding, property acquisition and exploration program planning.

14. Preparation of near-term and long-term exploration objectives and plans.

15. Determination of participation in lease sales.

16. Stratigraphic mapping.

17. Paleontological analysis of fossils and other ancient life forms found in surface and sub-surface rocks retrieved from Alaska.

18. Planning and analysis of seismic surveying.

19. Economic analysis and evaluation of prospective and newly discovered oil and gas reserves to determine

the size of such reserves, as well as to determine exploration and development feasibility.

20. Maintenance of a technical Alaska exploration library.

21. Processing, analysis, interpretation, and mapping of geological and geophysical data retrieved from Alaska.

C. *Production Activities*

22. Preparation, review and analysis of Prudhoe Bay Unit ("PBU") Five Year Plan.

23. Preparation for, support for, and monitoring of the activities of the PBU management committees, subcommittees, and task forces.

24. Production of long range capital budgets for the PBU to facilitate project review and long-term financing, as in the case, *e.g.*, of the PBU artificial lift program.

25. Preparation, processing and review of AFE (Authorization for Expenditure) requests.

26. General conceptual engineering for PBU production facilities to evaluate developing facility needs, develop technical proposals for new facilities, and evaluate proposals for modification of existing facilities.

27. Development of the PBU artificial lift program to enhance crude oil recovery.

28. Development of optimum flowline utilization at the PBU.

29. Development of optimum PBU field pipeline design, including development of large diameter pipeline systems for the PBU.

30. Development of the produced water injection project, which will provide facilities to inject water into the

Sadlerochit Reservoir, thereby increasing the estimated ultimate recovery of oil from the PBU.

31. Development of a facilities program for the PBU waterflood project.

32. Design of the water intake barge for the waterflood project, including design of the gravel bulkheads intended to protect the barge from destruction by ice movements in the Beaufort Sea.

33. Development of procedures to enhance the fuel efficiency of PBU machinery to achieve long range fuel conservation.

34. Supervision of outside contractors performing detail engineering and prefabrication work on PBU machinery in the Lower 48 and at other locations outside of Alaska.

35. Purchase or manufacture of virtually all equipment used at the PBU.

36. Analysis of and development of solutions to equipment failure at the PBU.

37. Projection of environment costs and the costs of drilling, developing, operating and transporting oil and/or gas from lease tracts with projected reserves.

38. Reservoir engineering to develop data on well producing characteristics and reservoir drive mechanisms.

39. Establishment of conceptual design parameters for lease sale areas, such as the types of production facilities which will be necessary, and whether the technology necessary to design, construct and operate the envisioned facilities exists or can be developed.

40. General reservoir analysis to determine the specific characteristics of oil and gas fields to determine the optimum method of developing and operating the field.

41. Permeability studies of well core data retrieved from Alaska.

42. Porosity studies of well core data retrieved from Alaska.

43. Integration of results of permeability and porosity studies with drill-stem test data retrieved from Alaska.

44. Development of sophisticated computer technology to analyze reservoir data retrieved from Alaska, including development of the 3-D reservoir model concept.

45. Generation of geological maps depicting structure, hydrocarbon content, fluid contact and distribution of porosity and permeability within reservoir rock.

46. Generation of base maps which depict land subdivisions, as well as rivers, lakes, and well locations.

47. Drilling engineering to provide engineering support for all exploratory wells drilled in Alaska.

48. Production engineering to solve problems arising during the portion of the flow of crude from the well bore through to the beginning of the pipeline, including problems associated with the gathering system, the flow stations, and the separators.

49. Engineering support for the Kuparuk field facilities project.

50. Engineering services to ensure a supply of properly manufactured casing, tubing and well heads for the North Slope.

51. Development and coordination of research and technological projects among various corporate entities.

52. Development of computer systems for production field automation.

53. Development of computer systems for North Slope crude production, including development of advanced inventory control systems.

54. Design of microwave communication systems for Prudhoe Bay, including VHF radio systems, switchboards, automation facilities, data gathering circuits and models.

D. *Pipeline Related Activities*

55. Supervision of the activities of Alyeska, which operates TAPS.

56. Preparation for, participation in and monitoring of the committees, subcommittees, and task forces which have been established to permit owner supervision of TAPS.

57. Review of, analysis of, and formulation of recommendations with respect to Alyeska budget policies and proposals.

58. Review of, analysis of, and formulation of recommendations with respect to Alyeska AFE requests.

59. Review of, analysis of, and formulation of recommendations with respect to TAPS pipeline operations, pipeline administration, issues pertaining to hazard risk management, and overall Alyeska goals, standards and objectives.

60. Constant review of all TAPS capital investment projects, irrespective of cost, to identify, investigate and prevent potential schedule slippage and cost overruns.

61. Periodic review of the status of the TAPS capital budget to assure compliance with budget forecasts and accurate reporting of project status.

62. Identification of all items requiring changes to the TAPS tariff rules and regulations, including rules and regulations pertaining to scheduling and tendering procedures, penalty provisions, and validity of bank charges and procedures.

63. Development of a drag reduction agent ("DRA") program, including construction of testing facilities and development of methodologies of application to avoid "shear" effects.

64. Review and analysis of oil measurement.

65. Review and analysis of pipeline stability, TAPS below ground monitoring program, and Alyeska's plans and cost estimates for repairs necessitated by pipeline settlement.

66. Review and analysis of all reports of insulation failure.

67. Review and analysis of the corrosion/Kaliper pig program.

68. Review and analysis of the ballast water treatment program at the Valdez Terminal, including review and analysis of environmental matters, such as permit stipulations.

69. Review and analysis of pipeline efficiency, including analysis of overall pumping configurations, logistical projects contemplated to enhance efficiency, operational problems such as piping vibration, turbine updating and contingency pump planning.

70. Review and analysis of "surge relief" in the TAPS pipeline.

71. Review of all proposed Alyeska contracts and the important terms of all major contracts.

72. Monitoring and analysis of all significant security activities.

73. Monitoring and analysis of all Alyeska employee relations activities.

74. Review and analysis of Alyeska's pipeline computer control system.

75. Review and analysis of procedures for crude tanker loading at the Valdez Terminal.

76. General activities related to common carrier operations.

77. Management of individual crude oil tenders to TAPS, including implementation of pro rata tendering procedures.

78. Review and analysis of all metering reports supplied by Alyeska.

79. Activities to ensure that shippers schedule adequate tankers for receipt of oil at Valdez, and that shippers comply with all applicable tariff regulations.

80. Preparation of crude oil movement schedules submitted to Alyeska.

81. Performance of all accounting associated with TAPS pipeline operations.

82. Review and analysis of crude oil working inventory levels in the Valdez Terminal storage facility.

E. *Downstream Activities*

83. Management and operation of ocean tankers.

84. Maintenance of liaison between ships and ports of call.

85. Contracting for and supervision of tanker maintenance and repair work, virtually all of which is performed in the Lower 48.

86. Interaction with industry associations and government agencies concerned with ocean shipping and ports and harbors.

87. Determination of adequacy of ship and berthing facilities.

88. Administration of rotational assignments of seagoing personnel to vessels.

89. Provisioning of vessels, including purchase of ships' stores and repair materials.

90. Negotiation and execution of charters of ocean tankers.

91. Analysis of vessel performance by chartered vessels and of warranties by tanker owners.

92. Marine research (*e.g.*, research to enhance hull smoothness).

93. Monitoring of oil spill performance, identification of pollution hazards, and development of environmental conservation programs and activities.

94. Expedition of vessel turnarounds to minimize vessel time in port.

95. Hiring of oceangoing employees, payment of oceangoing employees, administration of employee benefit plans, administration of labor relations matters, and coordination of training for oceangoing employees.

96. Long term planning for marine transportation of crude oil.

97. Computer analysis of vessel performance and logistical considerations.

98. Development and implementation of marine transportation strategy for moving Alaska North Slope ("ANS") crude out of Alaska.

99. Participation in the design and construction of vessels, including new vessels built for the ANS crude marine transportation system, such as the EXXON NORTH SLOPE, the EXXON BENECIA, and the ARCO SAG RIVER.

100. Participation in the winterization and retrofit of vessels engaged to carry ANS crude from Valdez.

101. Short and long range coordination of crude oil movements.

102. Development of periodic operating programs and plans for petroleum logistics.

103. Development of major petroleum product supply contract bidding and pricing strategy.

104. Coordination of the day-to-day operation of petroleum logistics with marketing, refining, marine and pipeline functions.

105. Scheduling of movements of raw materials and fuel products to maintain optimum inventories at refineries and primary marketing terminals.

106. Maintenance of records of historical data on supply operations to prepare necessary reports of inventories, imports and other operations for transmission to federal, state and industry agencies.

107. Identification and assessment of industry, government and public energy issues relating to petroleum supply operations, and development and implementation of appropriate policy statements, strategies and actions to deal with such issues.

108. Negotiation and administration of agreements for the purchase, sale and exchange of crudes.

109. Development of assessments and forecasts of industry refining and logistics capability.

110. Provision of mathematics, computing and system support.

111. Negotiation of supply contracts for large volume items.

112. Nomination of ANS crude to the TAPS pipeline.

113. Coordination and scheduling of the transfer of ANS crude from the TAPS terminal at Valdez to owned and chartered tankers.

114. Monitoring of marine movements of ANS crude from loading at Valdez to ultimate destination.

115. Negotiation and arrangement of time trades and/or exchanges of ANS crude at Valdez to insure proper inventory levels.

116. Matching of ANS crude availability to refining's optimum crude slate.

117. Continual assessment of the market for ANS crude in the West, Gulf and East Coast markets.

118. Planning for and implementation of new logistic systems such as the development of a Trans Panama Pipeline.

119. Modification of pipeline systems to accommodate crude transportation.

120. Design, testing, construction and operation of the ARCO refinery at Cherry Point, Washington, specifically for refining Alaskan North Slope crude oil.

121. Modification of existing refineries to allow refining of Alaskan North Slope crude oil.

F. *Research and Development*

122. Development of passive high strength shear joints to resolve the problem of well casing collapse in permafrost.

123. Development of subsurface safety valve used in the first North Slope wells.

124. Development of computer programs to estimate drilling costs.

125. Development of designs for roads, drill sites, bridges, fuel gas processing facilities and living quarters for the Arctic environment.

126. Development of methods of analysis of tectonically altered rock.

127. Adaptation of digital computer technology to overcome seismic "statics" biasing.

128. Biostratigraphic research and development of biostratigraphic techniques.

129. Development of three-dimensional seismic analysis and displays.

130. Development of the common depth point ("CDP") method for analysis of geophysical data.

131. Advancements in deconvolution to determine where the Sadlerochit formation appeared on seismic graphs.

132. Development of computer technology, for conversion of processed seismic data charts showing interval velocity versus depth of formation.

133. Development of computer programs to correct distortions occurring in well depth measurement in wells drilled at angles.

134. Development of reservoir engineering measurement, such as relative permeability and capillary pressures.

135. Research on corrosion inhibition, metallurgy, and drilling techniques.

136. Development of theories for solving casing collapse problems encountered in permafrost.

137. Development of an experimental program to solve well casing shear problems encountered as a result of permafrost subsidence.

138. Development and implementation of a valve testing program in a specially built "cold room."

139. Analysis of pipeline flow, including design and construction of special testing facilities.

140. Modification of ongoing research on oil spill contingency planning to include consideration of special problems created by Arctic conditions.

141. Development of a special Arctic cement for use in well casings.

142. Development of a nonfreezable gel packer fluid designed specifically for Arctic drilling.

143. Ongoing analysis of the problem of gas hydrate dissolution posed by drilling in the Kuparuk Field.

144. Development of cathodic protection to prevent well casing corrosion.

145. Development of specifications for the steel used in the TAPS pipeline.

146. Ongoing research into deposits of heavy, shallow oils in the cretaceous sands.

147. Marine seismic data acquisition research.

148. Development of angular correction computer programs.

149. Design of utility systems at the Valdez marine terminals.

150. Design of the Vapor Recovery unit at the Valdez marine terminal.

151. Design of above-ground pipeline "anchoring" devices for TAPS.

152. Development of manpower plans for TAPS.

153. Design of TAPS pipeline specifications.

154. Analysis of TAPS environmental problems and solutions to those problems.

155. Development of ballast waste water treatment facility for the Valdez marine terminal.

156. Assistance in fire and safety engineering.

157. Engineering analysis and testing of machinery.

G. AFFIDAVIT OF HORACE R. BROCK

STATE OF TEXAS
County of Denton } ss.

HORACE R. BROCK, being first duly sworn, deposes and says:

1. My name is Horace R. Brock. I give this affidavit for use in connection with the above-captioned litigation. The opinions expressed herein reflect my best professional judgment based on my professional experience and on information and materials reasonably relied on by persons in my field.

2. I am a Certified Public Accountant and hold a Ph.D. degree in accounting from the University of Texas. I am currently Distinguished Professor of Accounting, Director of the Extractive Industries Accounting Research Institute, and Senior Advisor to the Petroleum Center of the Professional Development Institute, all at North Texas State University, Denton, Texas. I have been actively engaged in teaching, research, writing, and consulting in the oil and gas industry for over 25 years. I served as Chairman of the Financial Accounting Standards Board's (FASB) Task Force on Financial Accounting and Reporting in the Extractive Industries (1976-1978) and as a consultant to the FASB during its preparation of the *Statement of Financial Accounting Standards No. 19*, "Financial Accounting and Reporting for Oil and Gas Producing Companies" (1976-1978). Also, I served as a member of the Security and Exchange Commission's Advisory Committee on Oil and Gas Accounting (1979-1981), and am now serving on the FASB's Task Force on Disclosures about Oil and Gas Producing Activities and on the American Institute of CPA's Oil and Gas Commit-

tee. Further information about my professional qualifications are summarized in the attached Vita.

3. I have reviewed the Complaints, the Counterclaim, the Memorandum of Points and Authorities filed by the State, the affidavits and deposition of Edward B. Deakin, the affidavit and deposition of Robert Conrad, the affidavit and deposition of Thomas Horst, a March 3, 1981 Memorandum from Wilson L. Condon to Governor Jay S. Hammond (with attachments) and the Alaska Oil and Gas Corporate Income Tax Act (the "Oil Tax Act") and the regulations thereto. In addition, I have reviewed affidavits prepared by employees of Atlantic Richfield Company, Exxon Corporation, and The Standard Oil Company.

SUMMARY OF CONCLUSIONS

4. From an accounting standpoint, the provisions of the Oil Tax Act and its implementing regulations are useless for the purpose of measuring income "actually earned" in Alaska by these taxpayers. There is no accounting basis for the State's argument that the Oil Tax Act reaches only income earned in Alaska.

5. The accounting procedures in the Oil Tax Act cannot properly be called "separate geographical accounting." Incompleteness and bias in the Oil Tax Act accounting procedures prevent those procedures from being relevant or reliable as measures of the income that the Alaska operations of an integrated oil company would have earned if operated as a separate business.

6. Petroleum accounting practices do not, as the State argues, normally treat production income as earned "at the wellhead." As to when such income is earned by consolidated enterprises like these taxpayers, generally accepted accounting principles for the petroleum industry

call for recognition of income only after the petroleum (or a product refined from it) passes outside the consolidated business through a sale or exchange. As to where the income is earned, generally accepted accounting principles do not support the State's assumption that the time of recognition determines the place to which the income should be assigned. If the State's assumption were correct, however, most income would have to be treated as earned outside Alaska.

7. The accounting procedures in the Oil Tax Act are not analogous, as the State suggests, to industry accounting practices. The various industry accounting systems described by Edward Deakin in his affidavit are all intended to accomplish purposes other than measurement of income earned within a particular geographical area.

THE INCOME ALLOCATION PROCEDURE IN THE OIL TAX ACT IS USELESS AS AN ACCOUNTING MEASURE OF INCOME "ACTUALLY EARNED" IN ALASKA

8. Under accepted accounting theory, *relevance* and *reliability* are the two primary qualities that accounting information must possess in order to be useful for decision making. The income measurement provisions in the Oil Tax Act do not meet either of these two primary characteristics of accounting usefulness if the purpose of the Act is to determine income "actually earned" by these taxpayers in Alaska.

9. The Financial Accounting Standards Board (FASB) has articulated the primary qualities that make accounting information useful. *Statement of Financial Accounting Concepts No. 2,* "Qualitative Characteristics of Accounting Information," (*SFAC No. 2*), Stamford, Ct: Financial Accounting Standards Board (1980). It is appropriate that the accounting provisions of the Oil Tax

Act be evaluated by these crieteria. As the FASB has noted, the two primary criteria for useful information are: (a) relevance and (b) reliability.

10. The concept of accounting "relevance," as explained in *SFAC No. 2*, turns on the logical relationship between information and the decision to be made:

> "[I]nformation must, of course, be logically related to a decision in order to be relevant to it. Mistaken attempts to base decisions on logically unrelated information cannot convert irrelevant information into relevant information any more than ignoring relevant information makes it irrelevant." *SFAC No. 2*, Par. 46.

11. To be relevant, accounting information must be complete:

> "Completeness of information . . . affects its relevance. Relevance of information is adversely affected if a relevant piece of information is omitted, even if the omission does not falsify what is shown." *Ibid.*, Par. 80.

12. The accounting concept of reliability, as summarized in *SFAC No. 2*, has two components. The first component, called "representational faithfulness," requires a "correspondence or agreement between a measure or description and the phenomenon it purports to represent." The second component is "verifiability." *SFAC No. 2*, Pars. 62 and 63.

13. Reliability is not present if a measurement is "biased." In turn, "[f]reedom from bias . . . implies that nothing material is left out of the information that may be necessary to insure that it validly represents the underlying events and conditions." Thus, "[r]eliability implies completeness of information. . . ." *Ibid.*, Par. 79.

14. The State of Alaska argues that the accounting provisions in the Oil Tax Act measure income "actually earned" in Alaska. Memorandum of Points and Authorities, page 7; Affidavit of Edward Deakin, Pars. 8-9. If this is taken as what the Oil Tax Act tries to do, it is possible to apply the recognized accounting concepts described above to evaluate the relevance and reliability of the Oil Tax Act in accomplishing that objective.

15. In my opinion, the accounting procedure under the Oil Tax Act is useless as a purported measure of income "actually earned" in Alaska by these taxpayers. I base this conclusion on my training and experience in the petroleum accounting field, on the affidavits provided by the taxpayers concerning their internal operations, on my review of the Oil Tax Act and its implementing regulations, and on the other materials I have reviewed in preparing this affidavit.

16. The Accounting Principles Board (APB) has correctly recognized that a company's income is usually earned *not* by only one activity but by numerous activities that jointly make essential contributions to the "earnings process":

> "Most types of revenue are the joint result of many profit-directed activities of an enterprise and revenue is often described as being "earned" gradually and continuously by the whole of enterprise activities. *Earning* in this sense is a technical term that refers to the activities that give rise to the revenue — purchasing, manufacturing, selling, rendering service, delivering goods, allowing other entities to use enterprise assets, the occurrence of an event specified in a contract, and so forth. All of the profit-directed activities of an enterprise that comprise the process by which revenue is earned may be called the

earning process." APB Statement No. 4, Par. 149. (emphasis in original.)

17. These taxpayers operate unitary enterprises in which income arises from a wide variety of activities that are carried out in many states and that result in taxation in many states. In particular, the taxpayers' income from the production, transportation, and sale or other disposition of Alaskan crude arises from a wide variety of activities in a number of states. The actual physical removal of oil or gas from the earth is only *one* of the necessary activities in the income-earning process of an oil and gas producing company. It is merely one step in a multitude of steps that begin with advance planning years before production. Long before oil or gas is produced in Alaska, the operator must engage in expensive, but essential activities that make ultimate production possible. Extensive research and development work will have been carried out over many years to develop exploration, drilling, and development techniques and equipment, many of them peculiar to the harsh environmental conditions of Alaska. Supply and maintenance procedures must be developed; personnel, facilities, and equipment must be planned and acquired. For an enterprise to operate in the difficult physical conditions in some areas of Alaska, advance planning is even more important than for most other areas. Both before and after production has begun, long-range planning activities, banking and financing arrangements, computer support facilities, accounting support, purchasing and storage organizations and facilities, legal support, and general corporate management are indispensable to the actual physical production of oil and gas. After the oil and gas are produced, it is essential to have transportation, storage, and marketing activities. As shown in the affidavits of the taxpayers, most of these activities occur outside of Alaska. No one can seriously question that these activities, no matter in which state

they are carried out, are an integral part of the revenue-earning process. Unfortunately, the accounting procedure required under the Oil Tax Act does not apportion any income to these essential out-out-state activities.

18. In summary, the measurement system in the Oil Tax Act disregards earnings from activities which are indispensable to production and disposition of oil and gas and which contribute to the income of these taxpayers. As a purported measure of income "actually earned" in Alaska, the accounting system in the Oil Tax Act lacks representational faithfulness because there is a lack of agreement between the income measure and the phenomenon (actual earnings in Alaska) that it purports to measure. The accounting scheme in the Oil Tax Act thus utterly fails to meet the reliability criterion for a useful accounting measure of income actually earned in Alaska.

19. The Oil Tax Act is also biased; it overattributes income to Alaska. The Alaskan activities of integrated petroleum companies have been largely limited to getting oil out of the ground and transporting it by pipeline. As explained above, virtually all of the other activities of these taxpayers that are essential for the income that Alaska taxes have occurred outside of Alaska. This uneven geographical distribution of the activities made it possible for Alaska to set up an allocation scheme in the Oil Tax Act that greatly overattributes income to Alaska. The Oil Tax Act takes the two activities that occur wholely within Alaska — the actual physical extraction of the crude oil and its pipeline transportation within the State — and attributes all income from the disposition of the oil to those activities. If other states in which these taxpayers carried on their multistate activities, but in which there is little or no oil and gas production, were to adopt the same rules specified in the Oil Tax Act, those states would be allocated an unreasonably low portion of

total unitary income. This would occur because the portion allocated to them would not reflect the true level of activities in those states.

20. The allocation rules in the Oil Tax Act are thus biased because they result in a measurement that tends to shift a disproportionate amount of income to the location where oil comes out of the ground, while disregarding completely the importance of other locations, like the place the business is managed or the place the oil is sold. This bias is another reason the allocation scheme in the Oil Tax Act cannot meet the reliability criterion for a purported measure of income "actually earned" in Alaska.

21. The information considered by the procedures in the Oil Tax Act is so incomplete that the measurement scheme also fails to meet the other primary accounting criterion for a system that is useful in measuring income "actually earned" in Alaska. The simplistic accounting approach in the Oil Tax Act is not "relevant" to measurement of actual earnings within the borders of the State because it fails to account for the contributions to earnings made by the vast array of activities outside Alaska that are essential to generation of revenue from oil produced in Alaska.

22. If an oil producing company had research facilities, computer facilities, purchasing functions, accounting activities, and sales activities only in states outside Alaska, but production only in Alaska, all of the company's unitary income would be taxed in Alaska under the Oil Tax Act, even though a part of its income would be subject to state income taxation in those other states where functions are performed. Even if the company subsequently moved all of its activities to Alaska, with no change in total unitary profit, the amount of its taxable unitary income deemed to be earned in Alaska would not

change. This is illogical and shows that the measure used in the Oil Tax Act does not provide a relevant measure of income "actually earned" in Alaska.

23. In short, the allocation procedure in the Oil Tax Act is not a relevant or reliable measure of income "actually earned" within the geographical boundaries of Alaska.

THE OIL TAX ACT IS NOT A PROPER "SEPARATE GEOGRAPHICAL ACCOUNTING" SYSTEM

24. The State of Alaska tries to justify the Oil Tax Act by calling it a system of "separate accounting." Memorandum of Points and Authorities, page 7; Affidavit of Edward Deakin, page 4. "Separate accounting" is not a term or concept that is commonly used in the accounting profession. That term is defined by the Attorney General of Alaska on page 3 of a Memorandum dated March 3, 1981 as follows: "Direct allocation — sometimes called separate accounting — . . . is a method by which specific items of income of a corporation are attributed to specific states where certain activities take place." If that is taken as the purported goal of the accounting provisions in the Oil Tax Act, it is possible to apply the criteria described above to see whether the Act's procedures are useful, in an accounting sense, for accomplishing that purpose. I shall use the term "separate geographical accounting" to describe this purported objective.

25. If the allocation scheme in the Oil Tax Act is tested under the relevance and reliability criteria as a purported system for "separate geographical accounting," the Oil Tax Act again fails both tests for the same reason that it fails to be useful as a purported measure of income "actually earned" in Alaska. Under a "separate geographical accounting" system, it is necessary to as-

sume that the corporate headquarters, research centers, and all other support activities located away from the field would operate as independent institutions. If that assumption is to be made, it is clear that these geographically segregated businesses would have to make a profit to survive. The allocation scheme in the Oil Tax Act does not properly attribute profit to activities traditionally located away from the field, including marketing activities.

26. The Oil Tax Act measure of income is again biased and incomplete if viewed as a purported system for "separate geographical accounting." In my opinion, the Oil Tax Act is not a relevant or reliable implementation of the concept of "separate geographical accounting."

PETROLEUM ACCOUNTING PRACTICES DO NOT SUPPORT THE STATE'S ARGUMENT THAT OIL AND GAS INCOME IS "EARNED AT THE WELLHEAD"

27. Petroleum accounting practices do not justify the methodology used by the Oil Tax Act as a purported measure of income "earned in" a particular state. The collection of standard accounting practices described by the State does not include a single system that purports to measure *where* income is earned geographically. These systems focus, instead, on the very different issues of *what* earned the income or *when* it was earned.

A. *Revenues Are Properly Recognized Only On Sale*

28. The State takes the concept of "recognition" and tries to argue that revenues from oil production are commonly and properly measured at the point of production. Affidavit of Edward Deakin, Par. 24. This is incorrect. Revenues from oil production are *not* properly recognized at the time of production.

29. The general principles of revenue recognition are expressed in Paragraph 150 of the Accounting Principles Board's *Statement No. 4*: "Realization. Revenue is generally recognized when both of the following conditions are met: (1) the earning process is complete or virtually complete, and (2) an exchange has taken place."

30. *Statement No. 4* reiterates many times that revenue should generally be recognized only when a sale has taken place. Examples are: "Revenue under present generally accepted accounting principles is derived from three general activities: (a) selling products, (b) rendering services and permitting others to use enterprise resources, which result in interest, rent, royalties, fees, and the like, and (c) disposing of resources other than products — for example, plant and equipment or investments in other entities." *Ibid*, Par. 148. "Furthermore, not all changes in the utility or price of assets are recognized. Increases in assets and the related revenue are usually not recorded if they result from events wholly internal to the enterprise. For example, revenue that is earned during the production process is generally not recorded until the goods and services are exchanged." *Ibid*, Par. 162.

31. The major reference (cited in the Affidavit of Edward Deakin, Par. 42) in accounting literature to the possibility of recording revenue at the time of production is found in Paragraph 184S-6D of *Statement No. 4*: "Completion of production. Revenue may be recorded at the completion of production of precious metals that have a fixed selling price and insignificant marketing costs. Similar treatment may also be accorded certain agricultural, mineral, and other products characterized by inability to determine unit acquisition costs, immediate marketability at quoted prices that cannot be influenced by the producer, and unit interchangeability." A similar statement is found in Paragraph 152 of *Statement No. 4*: "Revenue is

sometimes recognized on bases other than the realization rule. . . . Sometimes revenue is recognized at the completion of production and before a sale is made. Examples include certain precious metals and farm products with assured sales prices. The assured price, the difficulty in some situations in determining costs of products on hand, and the characteristic of unit interchangeability are reasons given to support this exception." (Note the omission in this paragraph of any reference to minerals.) This exception to the normal approach is sometimes called "net realizable value."

32. As made clear in Paragraph 184S-6D of *Statement No. 4*, possible exceptions to the rule that revenue should be recognized only at the time of, or after, sales take place, depend on a "fixed selling price" and "insignificant marketing costs" (both characterizing precious metals in the past). In addition, for minerals, the characteristics of "inability to determine unit acquisition cost, immediate marketability at quoted prices that cannot be influenced by the producer," and "unit interchangeability" are added.

33. These are not characteristics of oil produced on the North Slope in Alaska (or elsewhere unless there is a fixed price contract for sale of all production). There is no fixed selling price, no posted field price, and no immediate marketability at quoted prices that cannot be influenced by the producer. As a matter of fact most of the oil is sold outside Alaska and there is no buyer even available for oil at the wellhead in such large quantities. Affidavit of Thomas W. Gillette.

34. It is doubtful that major producers of oil and gas could sell their production of Alaskan oil and gas at the wellhead and thus "realize" income at known prices within a short period of time. Not only does no established field price exist for a substantial portion of Alas-

kan crude, but without the existence of the TAPS pipeline and other transportation facilities, the taxpayers' own refining capacity, and their own marketing facilities, it is doubtful that the integrated oil and gas companies operating on the North Slope could dispose of all the oil now being produced.

35. In computing their net income, integrated oil producers do not recognize revenue until sale is made to an outside party. My examination of 16 accounting reports filed by integrated petroleum companies with the Securities and Exchange Commission (the "SEC") and their public reports to shareholders for the year 1980 reveals that they universally followed this practice. The SEC itself, in describing the currently accepted methods of accounting for oil and gas production, stated that "revenue is recognized only upon sales to outside parties." *Accounting Series Release No. 253: Adoption of Requirements for Financial Accounting and Reporting Practices for Oil and Gas Producing Activities,* August, 1978, Par. 25.

36. A recent research study sponsored by the Financial Accounting Standards Board indeed suggests that it is rare for revenue to be recorded at the point of production by companies producing any minerals or metals — even companies producing precious metals. "Mining. The use of net realizable value to account for inventories of precious metals does not appear to be widespread. [Henry R. Jaenicke, *Summary of Present Practices in Recognizing Revenues, Expenses, Gains, and Losses*, Stamford, Ct.: FASB (1981), p. 71.] In the [American Institute of Certified Public Accountant's Accounting Research Statement No. 13], 'The Accounting Basis of Inventories' at (page 134), Horace G. Barden suggests that in the absence of fixed market prices the basis for valuing precious metals should be the same as

for other metals. Only if metals, both precious and non-precious, are produced as by-products would current practice support the use of market values, and only as a practical solution to a difficult cost allocation problem. Even then, while market value becomes the inventory basis for the byproduct, the use of market does not generate revenue; rather, the market value of a by-product is treated as a partial cost recovery and reduces the carrying value of the related principal product."*

37. The issue of when income is recognized, in any case, is irrelevant to the question of where the income is earned. The fact that income from oil is not recognized until the oil is sold to an outside party does not mean that the income from that sale is attributable entirely to the point of sale. Similarly, even if such income were recognized at the point of production, this would not mean that all of the income is earned at and attributable to the wellhead.

B. *Other Accounting Systems Do not Support Alaska*

38. Professor Deakin attempts to justify the Oil Tax Act's accounting procedure as a means of allocating unitary income to individual states on the basis of other accounting practices. This effort ignores the fact that accounting procedures and techniques are goal-specific and are frequently quite arbitrary and mechanical because of practical considerations. The revenue and ex-

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*Similar results were found in a survey by Peat, Marwick, Mitchell & Co. (Principles and Presentation: Mining) of the 1976 financial reporting practices of 39 mining companies in the United States, including producers of precious metals. This survey indicated that only two such companies principally used net realizable value. Comparable results were found in a survey by Earnest C. Janson, Stephen C. Knup, and David T. Wright of Coopers & Lybrand (Financial Reporting and Tax Practices in Nonferrous Mining, 8th Ed.).

pense allocations referred to by Professor Deakin in his Affidavit are unrelated to the allocation of unitary income for state tax purposes.

39. Accounting systems, procedures, and techniques, especially those used for internal control and reporting purposes, are chosen to fit specific needs. The purpose of some accounting systems is to provide internal information to managers in an enterprise to help them plan, direct, and control the company's activities and to evaluate the performance of responsible individuals and operating segments within the company. The purpose of other accounting systems is to provide useful information to stockholders, creditors, other interested groups, and the public at large about the activities and financial conditions of a business enterprise. The purpose of yet other accounting systems is to provide information to regulatory bodies and agencies. All of these purposes are different from the purpose of state income tax accounting, which is to measure the income earned in the state and equitably assign taxable income on that basis. Practices and procedures that may be entirely appropriate in accumulating and analyzing data for one purpose are likely to be completely unsatisfactory for another purpose.

40. The accounting procedure in the Oil Tax Act does not provide an accurate measure of the portion of a company's unitary income to be assigned to Alaska. As discussed above, the Act's accounting system is, in reality, a cost allocation process which gives no consideration to the contribution of activities, other than in Alaska, to the earning process.

41. Accounting on a lease-by-lease basis for federal income tax purposes (Affidavit of Edward Deakin, Par. 84) is required only for the purpose of calculating percentage depletion on mineral properties where percentage depletion is allowed. Depletion, which is conceptually a

cost allocation process, is required on a lease-by-lease basis (with some exceptions) because mineral rights are acquired in discrete lease-by-lease transactions. The cost of each individual lease is identified with that lease. The lease contract provides for specific delay rentals for the individual lease and for royalties to be paid to the lessor based on production from the specific lease. Where more than one owner is involved, revenues and expenses to be shared by each owner are based on the individual lease. Oil and gas reserves also are measured on a lease-by-lease basis. Thus, logic dictates that depletion of leasehold cost, or percentage depletion where it is allowed, should be computed on a lease-by-lease basis.

42. Percentage depletion is tentatively computed by applying the appropriate percentage to "gross income" from each "property," so that identification and measurement of "gross income" from the "property" is necessary. However, percentage depletion is limited to 50 percent of net income from the individual "property," so it is also necessary to develop some mechanical procedure for measuring "net income" from the "property." Some expenses are easily identified with a single lease; others must be allocated on some logical basis. The federal income tax laws apparently recognize that there is no single "correct" method for allocating indirect expenses and thus do not specify in detail how such allocations are to be made.

43. In any event, it must be remembered that the "net income" calculation is solely for the purpose of computing the limit on percentage depletion. The resulting "net income" figure cannot be viewed as a realistic and "true" measure of net income. It is simply a mechancial, legally imposed formula designed to achieve a given result. Furthermore, the depletion calculation of "net income" measures the income earned from all the activities that go into discovering, producing and profitably disposing of oil

from the lease, wherever those activities occur. This computation does not attempt to measure the income earned only from activities physically located on the leases. Lease-by-lease accounting required for federal income tax purposes is not geographic-based accounting; it is a contractual unit-based accounting method that has little relevance to geographic accounting.

44. The fact that management of oil and gas companies seek to identify revenues and expenses with business functions such as production, refining, or marketing for management purposes (Affidavit of Edward Deakin, Par. 89) has no bearing on the suitability of a purported geographic separate accounting system for state income tax purposes. Functional income measurement is far different from geographic income measurement. Internal accounting procedures, assumptions, and practices are designed to help management to plan, coordinate, control, and evaluate operations and performance. Data may be accumulated, dissected, and analyzed in a variety of ways. For internal planning and evaluation purposes, a variety of data may be used. For some purposes, expected future costs and revenues are the most important considerations. In other cases, marginal costs and revenues are the important elements. In other instances, sunk costs become the prime factor. Management can pick and choose from a wide variety of analytical techniques, a wide range of cost classifications, and a wide variety of techniques for "matching" costs and revenues in order to use a logical approach to problem solving and to make specific decisions about future actions. The procedures may be adapted to the company's organizational structure, its budgeting procedures, its techniques for measuring performance, or other factors. Such measurements are useful because they can be consistently applied, compared from period to period, and compared with budgeted or targeted measures.

45. It is not logical to conclude merely because a technique is used for internal management purposes and involves some type of measures for a segment of the enterprise that it should be adopted for the purpose of determining the portion of unitary income to be taxed by an individual state. Accounting is goal-specific. Assistance in management planning and control clearly is a different goal from measuring the portion of unitary income to be allocated to a state. What functional accounting tries to estimate is, for example, the result of operations of a corporation's retail marketing division. The fact that it may be possible to estimate the results of operations of an entire marketing division does not mean that it is possible to measure income earned in each state in which that division operates.

46. Internal and functional accounting may designate certain activities as "cost centers" and other activities as "profit centers." These designations, despite the names, do not suggest that the contributions to earnings are any greater from so-called "profit centers" than from "cost centers." The determining factor in the designation for internal and functional accounting purposes is administrative convenience. If the output of a particular activity can be measured or estimated with reasonable reliability, that activity is likely to be designated as a "profit center." If the output is difficult to measure, as is typically the case with management, research and development, administration, and similar activities, designation as a "cost center" is dictated by administrative convenience. If a determination of the geographic location of earnings is the goal of an accounting system, then the difficult task would have to be undertaken of assigning profit or loss to all locations where activities occur. Income (or loss) attribution would have to include all so-called "cost centers" as well as all "profit centers." The Oil Tax Act totally ignores this requirement.

47. Professor Deakin argues that separate accounting is required to determine the share of profits, costs and expenses applicable to each joint owner in a specific lease. Affidavit of Edward Deakin, Par. 90. "Joint interests" arise when two or more entities own shares of the working interest in a single lease or a group of unitized leases. One entity is named "operator" of the lease and is empowered to carry out activities to develop and operate the property. The operator incurs expenditures on behalf of the "non-operators," subject to their prior approval of specified items. The operator often uses the operator's own personnel and facilities, providing equipment, supervision and services. Traditionally the operator is not permitted to make a profit at the expense of the other joint-interest owners. Consequently, no effort is made by joint-interest accounting conventions to assign profit to the services provided by the operator to the joint project. Since each party shares the revenues from that venture covered in the contract and each party must bear a share of costs and expenses related to that specific property, it is necessary to carefully define which costs and expenses are to be shared and how they are to be measured. It is irrelevant to the parties *where* the costs and expenses occur so long as they are incurred as part of the lease venture. Thus, joint-interest accounting has no relevance to the issue of where particular income is earned.

48. Some costs clearly relate to the single property — for example, equipment put on the lease property. It is difficult to determine the amount of some other costs, especially when the operator's own personnel and facilities are used, that apply to the individual jointly owned lease and should be borne by the non-operators. As a result there have historically been many disagreements between parties to agreements. Thus the Council of Petroleum Accountants Societies (COPAS) was formed to develop equitable and practical procedures to be followed

in accounting for "joint operations." In achieving this goal, COPAS has issued 17 *Bulletins* to guide its members. Emphasis in the relevant *Bulletins* is placed on charges and credits to be made by the "operator" to the non-operating owners in a joint venture, including "indirectly chargeable" costs, warehouse overhead, district overhead, and other overhead. Guidance is also given on other topics to facilitate smooth joint interest operations. The problems of allocation are so complex and so unusual on the North Slope that COPAS has issued a *Bulletin* on that individual topic. The COPAS *Bulletins* were developed with specific limited purposes in mind that have nothing to do with assignment of a company's unitary income to a geographical location.

49. The fact that the U.S. Bureau of Census requires a separate reporting of production, lease revenues, and direct costs of Alaskan oil and gas producing operations (U.S. Bureau of Census, Form MA13-K, Survey of Oil and Gas Producing Companies) is irrelevant to the allocation of unitary income to a single state. Income is not divided geographically by where it is earned for purposes of the Bureau of Census Report. And for good reason, because it is impossible to determine directly where income is earned. Instead, companies merely report the total revenues from oil and gas extracted in Alaska that year. Although the companies report the direct expenditures associated with exploration, development, and production that are incurred in Alaska, no attempt is made to determine what other costs are incurred in producing the oil or to divide the revenue between the various activities that generated it. As a matter of fact, Form MA13-K makes no attempt to determine what part of any expenditure has been or should be charged to expense or has been or should be capitalized for the year. The form certainly does not purport to collect information that could be used to arrive at an "income" amount for Alaska. Suggestions

that this data somehow permit an estimate of "income from Alaska oil producing activities" (Affidavit of Edward Deakin, Par. 113) ignore the limited scope of the Bureau of Census' data-gathering requirements.

50. There are many leases subject to so-called "net profits interests" which grant to the owner or holder a share of "net profits" from the individual lease. The contracts represent merely a means for dividing the revenue attributed to the lease by the contract. The contracts do not set up a procedure for determining where the revenue attributed to the lease is specifically earned. For example, the contract may provide that the holder of the net profits interest is to be paid 25 percent of the "net profit" from a lease if there is a "cumulative" net profit from the lease. However, the interest holder has no liability for expenses incurred in excess of revenues. This contract represents merely a means of providing the net profits interest owner a share of the revenues, but requiring that owner to share a limited part of the risk of developing and operating the lease through the reduction or elimination of that owner's share of revenues if expenses are high. The contract very carefully details the components of "net profits," indicating what revenues are to be included and what specific expenditures related to the lease are to be deducted. Although this demonstrates that an arbitrary allocation of overhead costs is possible, it does not show that determination of the geographical source of earnings from an integrated oil company is practical. Nothing in this procedure supports the argument (Affidavit of Edward Deakin, Par. 86) that it has validity as an approach to reasonably allocating unitary income among states.

51. The argument that the U.S. Department of Energy regulations on profit share leasing allow overhead costs on a percentage basis (Affidavit of Edward Deakin, Par.

120) ignores the fact that such contracts, like the joint-interest procedures and net profits leases, merely represent a way in which the lessor and lessee have agreed to define their respective shares of revenue attributed to the lease by contract. The inclusion of an overhead charge in the deductible expenses is merely a means of attempting to arrive at an equitable means of dividing revenues from the specific lease and is inapplicable to the allocation to individual states of unitary income.

52. The fact that "[f]or all practical purposes, companies are required to compute income for each barrel of oil for the 'Windfall Profits (sic) Tax'" (Affidavit of Edward Deakin, Par. 85) is irrelevant to the problem of allocating unitary income to states. Internal Revenue Code Section 4988(b)(i) provides that the windfall profit on a barrel of oil may not exceed 90 percent of the net income attributable to the barrel. The purpose of this provision is to offer the taxpayer some protection and relief against the tax on production from a property in a situation in which operating expenses are unusually high on the property. Because of certain complications in the law, relating to the time for measuring profit from the lease, the law based the limitation on taxable windfall profit on net income per barrel. "Net income" as defined for this purpose is closely tied to the calculation of "taxable income" from the "property" for purposes of computing the limit on percentage depletion. The entire procedure for computing the per barrel "net income" for windfall profit tax purposes is a mechanical one designed to achieve a specific result — providing limited relief to taxpayers in certain cases.

53. Knowing how much "profit" (however defined) is made on a barrel of oil, moreover, says nothing about where that profit was earned. The Windfall Profit Tax

procedure is not intended as, nor is it meaningful as, a device for allocating unitary income to specific states.

CONCLUSION

54. The allocation procedure in the Oil Tax Act cannot be justified as a useful accounting measure of income "actually earned" in Alaska nor as a "separate geographical accounting" system. The simplistic approach in the Act is neither relevant to, nor reliable for, those purported purposes.

55. Further, petroleum accounting practices cannot be invoked to support the argument of the State that production income is treated as earned at the wellhead. Under prevailing petroleum accounting practices, the income from petroleum produced in Alaska is not recognized until a third party purchases either the crude oil or a refined product derived from that crude oil. Moreover, the concept of recognition is a measure of *when* the income is placed on the books rather than *where* the income is earned.

56. Each of the industry accounting practices cited by the State was intended for a purpose other than measuring the geographic point at which a particular amount of income was earned, and the Oil Tax Act cannot be justified by reference to these practices.

Further affiant sayeth not.

/s/ Horace R. Brock
Horace R. Brock

Subscribed and sworn to before me this 26th day of July, 1982.

/s/ Betty Fowler
Notary Public in and for the
State of Texas

My commission expires 1-28-85

[Vita omitted]

H. SUPPLEMENTAL AFFIDAVIT OF HORACE R. BROCK

Horace R. Brock, being duly sworn, deposed upon his oath as follows:

1. My qualifications and background are contained in my first affidavit dated July 26, 1982 and filed in the above-captioned litigation. The opinions expressed herein reflect my best professional judgment based on my professional experience and on information and materials reasonably relied upon by persons in my field.

SUMMARY

2. As I explained in my first affidavit, the principal fault of the Oil Tax Act (AS 43.21) was that it taxed 100% of the income from the production and sale of Alaskan crude oil, even though a significant amount of that income was earned through and attributable to a myriad of activities outside Alaska. In his latest affidavit, Deakin now appears to recognize that the income was earned through and attributable to activities in states other than Alaska. Deakin Second Supplemental Affidavit ("Deakin's Third Affidavit"), paragraph 3. Although he now accepts the major premise of the taxpayers, he attempts to make the new argument that the Oil Tax Act allowed a deduction for profits from those activities outside Alaska. Deakin's latest argument is simply incorrect.

3. Recognizing the weakness of this argument, Deakin goes on to assert that any profit attributable to "overhead and administrative" activities outside Alaska was so small as to have been insignificant. Not only does Deakin ignore the profit that was attributable to all the other out-of-state activities, but also his calculation of the amount

of profit attributable to general overhead and administration ("G&A") is arbitrary, meaningless, and wrong.

4. Deakin also implies that the taxpayers have measured the "net production income" they earned in Alaska, and that their measure is equal to or greater than the "net production income" taxed by the Oil Tax Act. Contrary to what Deakin implies, the accounting documents he relies upon do not measure the "net production income" the taxpayers earned in Alaska and do not contain data from which a meaningful computation can be made of that income.

5. Deakin also attempts to rebut the proof of double taxation provided by the taxpayers and fails in the effort. Deakin ignores the uncontroverted proof of the taxpayers that more than 100% of their income from the production and sale of Alaskan crude oil was taxed by the states as a result of the Oil Tax Act. Instead, Deakin focuses solely on nationwide book income, which is a fallacious approach. Nationwide income is the wrong basis for measuring whether a taxpayer is subject to double taxation, and book income is the wrong measure of income for tax purposes.

ALASKA TAXED INCOME EARNED OUTSIDE ALASKA

6. By allocating 100% of the income from the production and sale of Alaskan oil exclusively to Alaska, the Oil Tax Act treated income earned in many states as if it had all been earned in Alaska. Deakin opines that "neither the costs nor the profits attributable to out-of-state activities [were] included in the final taxable income calculated under the Oil Tax Act and its implementing regulations. Deakin's Third Affidavit, paragraph 3. His discussion of this point, however, attempts to show only that profit was allocated to two narrow aspects of out-of-state activities

(transportation and G&A), and even that discussion is wrong.

1. *Transportation.*

7. Deakin alleges that 15 AAC 21.130 allowed a "deduction of the *full* costs *and profits* of tanker transportation from Valdez. . ." Deakin's Third Affidavit, paragraph 18 (emphasis added). This is incorrect. The Alaskan regulations provided a deduction for the "reasonable cost of transportation," which was limited in practice to the "actual cost of transportation." 15 AAC 21.120 & 21.128. In calculating the "actual cost of transportation," the regulations permitted the taxpayer to include a small "return on the acquisition cost" of any vessel owned or effectively owned by the taxpayer. But this amount merely compensated the taxpayer for part of the cost of the capital invested in the vessel. The regulations allowed no deduction for the profits attributable to operating the vessel.

8. In more detail, 15 AAC 21.130 provided that the "actual cost of transportation" would equal the sum of (1) voyage and port costs, (2) positioning costs, (3) depreciation of any vessel owned or effectively owned by the taxpayer, and (4) a partial return on the acquisition cost of any such vessel (to the extent that return figure exceeds the depreciation allowance). The allowed return on the acquisition cost was extremely limited. The return was restricted, after tax, to the "average annual national inflation rate" at the time that the vessel was constructed or acquired plus 2 percent. The "average annual national inflation rate" was very conservatively defined as the GNP deflator, which has been traditionally lower than more appropriate indices. And, as noted above, the taxpayer was not allowed to deduct this entire amount, but only this amount minus depreciation. Thus the allowed

return equalled zero if the depreciation allowance was larger than the GNP deflator rate plus 2% (after taxes). Further, for the period in question, the allowed return was almost certain to be lower than the then-current cost of capital.

9. This rather complicated regulatory provision can best be illustrated with a typical example. The Exxon San Francisco was constructed in 1970 when the rate of inflation (calculated by the GNP deflator) was 5.35%. The after-tax rate of return was thus limited to 7.35% (5.35% plus 2%) less the amount of depreciation. Using the statutory Federal income tax rate of 46%, this means that the *pre*-tax return was limited to 13.6% less the amount of depreciation. Straight line depreciation on the original cost over twenty years was 5% per year. Thus the pre-tax return was limited to only 8.6%. The average cost of capital (as measured by the prime rate), however, was 9.1% in 1978, 12.7% in 1979, 15.3% in 1980, and 19.2% in 1981.

10. Under 15 AAC 21.130, therefore, the taxpayers were only compensated for the costs of marine transportation, including a partial allowance for the cost of any capital invested in a vessel owned or effectively owned by the taxpayer. No deduction was given to the taxpayers for the profits attributable to operating vessels between Alaska and the Lower 48. This means that Alaska taxed profits attributable to the management and operation of ocean tankers, the provisioning of those vessels, the maintenance and repair of the fleet, and all of the other activities identified in the taxpayers' earlier affidavits that contributed to the marine transportation of Alaskan oil to the markets.

11. As Deakin notes, 15 AAC 21.128 provided that the Department of Revenue could compute the "reasonable cost of transportation" as the "fair market value" of

equivalent transportation. However, the fair market value could only be used where the Department determined that the taxpayer's method of transporting the oil was "not reasonable in view of the existing alternative methods of transportation at the time the taxpayer entered into the transportation commitment." 15 AAC 21.128(3). This presumably means that fair market value could only be used where it was less than the "actual cost of transportation."

12. Deakin implies that the taxpayer had a choice of using either "actual cost" or "fair market value." But the choice was solely that of Alaska. This is demonstrated by the fact that the Alaska Department of Revenue refused to permit Exxon to use "fair market value" in computing its transportation deduction under 15 AAC 21.130. Supplementary Affidavit of Oscar E. Jones, paragraphs 2 and 3.

2. *Overhead and Administrative Activities.*

13. Deakin also asserts that the Oil Tax Act regulations permitted the taxpayers "to deduct the full cost of and reasonable profits attributable to all of their general overhead and administrative activities 'attributable to deriving income from oil or gas production in the state.' " Deakin's Third Affidavit, paragraph 20. This assertion is also wrong.

14. As Deakin admits, the regulations only permitted a deduction for profits on G&A when profits were "actually allocated to general overhead and administrative activities for purposes of reporting that year's earnings and profits to the stockholders." 15 AAC 21.290(b). As Professor Davidson noted in his original Affidavit, this creates nothing more than "the illusion of allowing some indirect profit recognition" because "generally accepted accounting principles, which are binding on the taxpay-

ers, do not permit *any* profit to be added to overhead and administrative costs when deducting them from revenue in the calculation of income of the enterprise as reported to stockholders." Davidson Affidavit, note 2, page 6. Professor Davidson's correct conclusion is based on the well established accounting principle that entity income as reported to shareholders results only from sales of goods and services to outsiders. See APB Statement No. 4, paragraph 148.

15. Deakin suggests that profits might be allocated to general overhead and administrative activities in disclosing segment contribution. Deakin's Third Affidavit, paragraph 22. Even in disclosures of segment contribution, accepted practices would not consider G&A as a segment for which contribution is measured. FASB Statement No. 14, which governs the disclosure of segment contribution, defines the segments for which contributions can normally be shown as those "component[s] of an enterprise engaged in providing a product or service or a group of related products and services *primarily to unaffiliated customers (i.e., customers outside the enterprise) for a profit.*" FASB Statement No. 14, paragraph 10(a) (emphasis added). The taxpayers, of course do not sell their G&A services "primarily to unaffiliated customers." *See also* FASB Statement No. 14, paragraphs 10(c), 10(d) and 11.

16. The Oil Tax Act regulation that Deakin relies upon, moreover, was not issued until March 26, 1982, after the repeal of the Oil Tax Act and after the financial reports to the taxpayers' shareholders for all of the years in question were prepared. Prior to March 26, 1982, the relevant regulation flatly provided a deduction only for the cost of G&A. At the time the new regulation was issued, the Department of Revenue must have known that the taxpayers had not allocated any profit to general

overhead and administrative activities in these financial reports. The Department of Revenue thus provided for a deduction of profit on G&A only in a situation that it already knew did not exist at any time when the Oil Tax Act was in effect.

3. *Other Out-of-state Activities.*

17. Although Deakin states in his introduction that the Oil Tax Act allowed a "complete deduction" for "all profits" of "all contributions from out-of state activities" (Deakin's Third Affidavit, paragraph 3), his inaccurate discussion deals only with transportation and G&A. Earnings also arose from other out-of-state activities that contributed to the income that Alaska taxed. As I noted in paragraph 17 of my original Affidavit, for example, some of the income must be attributed to the states where the crude oil was stored or marketed. But even Deakin's incorrect interpretation of the Oil Tax Act and its implementing regulations would not deduct this out-of-state profit. Deakin similarly ignores all of the other out-of-state activities that contributed to the income.

OUT-OF-STATE PROFITS THAT ALASKA TAXES ARE SIGNIFICANT.

18. Deakin purports to compute that the profit from G&A was equal to 0.8% of the net production income taxed by Alaska, but this is a meaningless calculation based on a series of questionable assumptions and hypotheses. Deakin begins by assuming that the overhead incurred by these taxpayers in producing and selling Alaskan crude oil equaled 9.6% of total expenditures and that the taxpayers earned 13.6% before taxes on each dollar of expenses. Deakin's Third Affidavit, paragraph 25. He claims to derive his 9.6% overhead percentage from nationwide and industry-wide Census data, but cal-

culates his 13.6% profit margin on a company-wide basis for ARCO, Exxon, and Sohio only.[1] He then multiplies the nationwide figure by the company-wide figure and divides by 1.6 to reflect the fact that expenditures in conjunction with the production and sale of Alaskan crude oil earned (according to Deakin) a profit margin of over 60% (not the 13.6% profit margin that he used earlier in his same calculation). Deakin's Third Affidavit, note 15, page 14. This mixture of nationwide, company-wide, and Alaska-only figures renders this calculation totally meaningless. Not only are the data not comparable, but the calculation itself is internally inconsistent.

19. This inconsistency can be easily illustrated. In paragraph 24 of his Third Affidavit, Deakin concludes that an average profit of "13.6% before taxes on each dollar of expenses" is applicable to company-wide activities. Deakin also concludes in that paragraph of his affidavit that data for the oil industry nationwide would apply to the three companies involved, and he further concludes that the three companies' nationwide "average profit markup" applies to Alaska. If Deakin's 13.6% "profit before taxes on each dollar of expense" is multiplied by Deakin's estimate of total expenses of $1,309.2 million for all production in Alaska in 1978 (Deakin's Third Affidavit, Appendix II), Deakin's estimate of net income from production of *all* companies in Alaska that year would be only $178.1 million (13.6% × $1,309.2 million) in that year. Obviously this cannot be reconciled

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[1]The use of a company-wide rate of profit to expenses for companies like the taxpayers who engage in a myriad of worldwide activities and operations is meaningless. Deakin furthermore appears to include taxes (other than income taxes) in expenses, which further distorts his result. Companies do not "earn income" on their tax payments and taxes should therefore not be included in expenses in determining the rate of profits to expenses.

with Deakin's estimate of $307.9 million, $242.4 million, and $432.1 million of net income for ARCO, Exxon and Sohio, respectively, in 1978. Deakin's Third Affidavit, paragraphs 9, 10 and 12.

20. If Deakin is correct that the profit contribution of a particular activity may be determined by looking at the expenses incurred in that activity compared to total expenses, Oil Tax Act returns can be used to show that a substantial amount of the "net production income" taxed by Alaska was earned through out-of-state activities. According to Exxon's 1980 Oil Tax Act return, for example, Exxon incurred approximately $470 million in expenses (including tanker costs and excluding taxes) in generating the "net production income" taxed by Alaska. The only costs that are identifiable as apparently purely Alaskan are Exxon's "acquisition costs," which equalled $138,609, or only about 0.1% of Exxon's total expenses. Tanker, G&A and interest expenses, which were all incurred primarily out-of-state, totalled almost $380 million, or about 80% of Exxon's total expenditures. The other expenditures were made up of both in-state and out-of-state activities that cannot be as easily separated. Deakin's methodology is wrong, but, if it were correct, it shows that the Oil Tax Act taxed a very substantial amount of out-of-state income.

THE TAXPAYERS' REPORTS DO NOT SUPPORT ALASKA'S CALCULATIONS OF ALASKAN INCOME.

21. Deakin contends that the taxpayers themselves "calculated and reported their Alaska production income to (in various cases) their shareholders, U.S. Government agencies, and other state taxing authorities for the tax years 1978, 1979, and 1980." Deakin's Third Affidavit, paragraph 6. The reports that Deakin discusses, however,

do not contain any estimate of the amount of production income earned by the taxpayers in Alaska; nor do they contain information from which that amount could be calculated.

22. As Deakin notes, ARCO's Illinois and Indiana state income tax returns report its net income from the Prudhoe Bay Unit partnership. As my original affidavit pointed out in paragraph 47, however, the income of a multistate partnership arises from a multitude of activities in many states and cannot be equated with income "actually earned" in any one state. The fact that the Prudhoe Bay partnership carries on some activities in Alaska does not mean that all of the income assigned to that partnership is earned in Alaska. The activities in other states that support Alaska production are typically included in the costs charged by the operators to the partnership. Moreover, as evidenced by the ARCO internal affidavits, many activities which contribute to the generation of income from ARCO's share of Prudhoe Bay Unit production took place totally outside the Prudhoe Bay Unit partnership, and the costs for such activities would customarily be borne by ARCO outside the partnership. There are three important points. First, the income from the Prudhoe Bay Unit does not arise solely from activities in Alaska. Second, the sales that generated the income occurred outside Alaska. Lastly, the Prudhoe Bay Unit computation of income would not reflect all the contributions of the unitary business to this portion of that business. Indeed, on audit, Indiana adjusted ARCO's income by adding back the Prudhoe Bay Unit partnership income and that state required apportionment of a percentage of that income to Indiana. ARCO agreed with that adjustment.

23. Deakin contends that Sohio "reports its Alaska net production income separately in its annual reports and

SEC 10-K filings." Deakin's Third Affidavit, paragraph 12. This is incorrect. Deakin purports to compute "Sohio's Alaska Production Adjusted Book Income Estimates" from various figures Sohio reports to its shareholders, such as its dollar revenues per barrel of crude oil and the daily production of crude oil in Alaska. Deakin's Third Affidavit, Appendix I. Even accepting the various assumptions that Deakin adopts in order to compute this estimate, however, all that Deakin has estimated is the total income, wherever earned, from Sohio's production and sale of Alaskan oil. Deakin makes no attempt to determine what portion of this income is actually earned in Alaska.

24. Deakin also contends that the taxpayers' Alaskan income can be calculated from their EIA 28 forms, but again the underlying documents do not permit the computation that Deakin claims to made. Deakin, for example, alleges that Exxon's 1978 Alaskan production income can be calculated by taking the revenues reported for the Prudhoe Bay Unit joint venture from Exxon's 1978 EIA 28 and subtracting the "general operating expenses" reported on the same form for Alaska. The joint venture revenues, however, are not limited to revenues earned solely in Alaska, but represent total revenues earned throughout the United States from the production and sale of Alaskan crude oil. The "general operating expenses" listed on Exxon's EIA 28, moreover, are only some of the expenses that were incurred in producing and selling that oil. In short, not only is Deakin's purported calculation of Exxon's Alaskan production income wrong in terms of methodology but it is also inaccurate mathematically. Inaccuracies of the same type are present in the calculations attempted for ARCO and Sohio. All of these errors are discussed in more detail in the Affidavits of Thomas M. Blackwell (ARCO) and Donald O. Maxwell

(Sohio) and the Supplementary Affidavit of Thomas W. Gillette (Exxon).

25. Particularly egregious is Deakin's method of calculating Exxon's 1980 Alaskan production income. Deakin begins by taking the gross revenue figure from Exxon's Oil Tax Act return (one of the very numbers that he is purporting to verify) and then subtracts "general operating expenses" as reported on Exxon's EIA 28. It is not surprising that he ends up with a number very close to the net production income taxed by Alaska. What is surprising is that, even though Deakin only subtracts some of the relevant expenses in arriving at this number, he still comes up with a figure *less* than the amount taxed by Alaska. This suggests that, not only did the Oil Tax Act fail to allow any profit deduction for out-of-state contributions (as explained above), but the Oil Tax Act may not have allowed even a complete deduction for all the relevant *costs*.

DEAKIN DOES NOT REFUTE THE TAXPAYERS' PROOF OF DOUBLE TAXATION.

26. As the taxpayers have shown, their income from the production and sale of Alaskan crude oil was double taxed as a result of the Oil Tax Act. Affidavits of William J. Baumol, paragraph 41, Albert M. Church, paragraph 15, Sidney Davidson, paragraph 30, Scott Tompkins (ARCO), R. F. Heidner (Exxon), and Wayne Tanner (Sohio). Deakin chooses to ignore this proof and, instead, concentrates on whether the total income taxed by all states exceeded the total income of each consolidated company as reported to its shareholders ("book income").

27. Deakin's inquiry is irrelevant. Purely Alaskan corporations are favored over multistate corporations, such as the taxpayers, when the taxpayers' income from the

sale and production of Alaskan crude oil is double taxed, whether or not more than 100% of their total nationwide income is double taxed. Church Affidavit, paragraphs 15-16. The fact that certain states, such as Texas, choose not to tax their share of the taxpayers' total nationwide unitary income does not eliminate this favoritism. The taxpayers are still taxed on more than 100% of their income from the production and sale of Alaskan crude oil, while purely Alaskan corporations are not. Similarly, simply because a state like Texas does not tax its share of the taxpayers' total unitary income does not give Alaska the right to usurp that income and tax more than its share of that income.

28. Further, book income is not necessarily the proper measure of whether more than 100% of the total income of an entity has been subjected to taxation. As Deakin himself recognized, book income and federal taxable income will theoretically be equal over time. Deakin Deposition, page 125-126. Since the Oil Tax Act uses federal taxable income as its base for the apportionment provision in AS 43.21.040, a more appropriate and comparable measure of total income would be the federal taxable income of the taxpayers. As shown by the Affidavits of Scott Tompkins and Wayne Tanner, more than 100% of the federal taxable income of ARCO and Sohio was actually taxed by the Oil Tax Act. This uncontroverted showing is, in my opinion, more meaningful than the book income test even though the proper standard should look solely at income from the production and sale of Alaskan crude oil.

Further affiant sayeth not.

/s/ Horace R. Brock

Horace R. Brock

SUBSCRIBED AND SWORN TO before me, the undersigned authority, this 16 day of November, 1982.

/s/ Audrey Matthews

Notary Public for the
State of Texas

My commission expires:

AUDREY MATTHEWS
Notary Public, State of Texas
My Commission Expires Dec. 31, 1984

I. AFFIDAVIT OF THOMAS W. GILLETTE

STATE OF MAINE
COUNTY OF KENNEBEC } ss.:

THOMAS W. GILLETTE, being first duly sworn, deposes and says:

1. I am currently a Senior Supply Consultant in the Supply Department of Exxon Company, U.S.A. ("Exxon"). I have been asked to describe in this affidavit the activities of Exxon's Supply Department, which coordinates the interrelated production, transportation, refining and marketing system used by Exxon to produce and market Alaska North Slope ("ANS") crude oil and products refined therefrom. The facts set forth in this affidavit are personally known to me. I have first hand knowledge of those facts, or they are facts regularly reported to me and relied upon and used in the regular operation of the business of Exxon's Supply Department. If called as a witness, I could competently testify to the facts set forth in this affidavit.

2. In my capacity as Senior Supply Consultant, I have responsibility for near and long-term special studies of the transportation and supply of crude oil and products to various geographical areas of the United States. From 1973 until December 1980, when I assumed my present position, I was Manager of Regulatory Reporting for Exxon's Controller's department. During 1968, I was responsible for economic planning for Esso Australia. I have been employed by Exxon since 1956. My responsibilities at Exxon, especially since 1973 have required an understanding of Exxon's crude oil and product supply system. Consequently, I have knowledge of the organization of and functions performed by the Exxon Supply Department.

3. Unless otherwise stated, descriptions in this affidavit of Supply Department activities and statements made in the present tense are true of and applicable to the period 1978-1981.

INTRODUCTION

4. Because there is no meaningful crude market in Alaska — certainly no market capable of absorbing more than a small fraction of the crude produced in the state — virtually all of Exxon's share of ANS crude must be transported out of Alaska to the Lower 48,* where the markets exist.** As will be discussed in this affidavit, the Supply Department is the nerve center for the crude oil and petroleum products*** distribution network which Exxon uses to transport its share of ANS from Alaska to Exxon's refineries and other destinations in the Lower 48, and, ultimately, to Exxon customers throughout the Lower 48 in the form of refined petroleum products. Utilizing personnel with diverse expertise from throughout the Exxon organization, Supply coordinates the interaction of all of the varied Exxon functions — including, production, refining, marine and pipeline transportation, and marketing — which are necessary for Exxon to market its ANS crude and the products refined therefrom. Supply's coordinative work is essential to the profitable disposition of Exxon's ANS crude, and, as the following discussion makes clear, this work is performed exclusively in Houston, Texas.

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*As used herein, "Lower 48" includes Hawaii and Puerto Rico.

**Pursuant to federal law, ANS cannot be exported outside the United States.

***Except as otherwise stated, as used herein, "products" does not include chemical products.

II. ANS CRUDE: AN OVERVIEW

5. In Alaska, Exxon has an ownership interest in approximately 20% of the ANS crude produced on the North Slope of Alaska at the Prudhoe Bay field. The process by which this ANS crude is produced, distributed, refined and marketed by Exxon is complex and requires the coordinated interaction of the majority of Exxon's key operating departments, including the Production, Marine, Refining, Marketing and Supply Departments, as well as Exxon affiliates such as the Exxon Pipeline Company ("EPC"). With the exception of the Production Department, which maintains a small number of personnel in Alaska, none of these Exxon operating departments or affiliates maintains personnel in Alaska, or routinely performs any significant functions there. Now, as during the period 1978-1981, the vast majority of activity necessary to Exxon's production and marketing of ANS crude and products refined therefrom takes place in the Lower 48 states.

6. Although 15 entities in addition to Exxon have ownership interests in the crude produced at Prudhoe Bay, the field has been "unitized" to permit the development and operation of the producing reservoir in a manner that will achieve the maximum efficient and economical recovery of crude reserves. As a result of unitization, the field is operated on behalf of all of the interest owners, including Exxon, by two companies (Sohio and Arco), acting as the designated production operators. All ANS crude produced by the operators is allocated to each of the interest owners in proportion to their ownership share in the crude. Thus, approximately

20% of all of the ANS produced by the operators is allocated to Exxon.*

7. All of Exxon's share of ANS crude which is transported from the North Slope out of Alaska to markets in the Lower 48 states is placed into the Trans Alaska Pipeline System ("TAPS") at Pump Station No. 1 at the Prudhoe Bay field for the nearly 800 mile, eight-day journey south to the ice free tanker loading port of Valdez, Alaska. At the Valdez Marine Terminal, this ANS crude is loaded aboard tankers owned or chartered by Exxon for movement to destinations in the Lower 48 on the West, Gulf and East Coasts of the United States.

8. Exxon sells only a small fraction of its share of ANS crude in Alaska — 4.4% during the period from the start up of TAPS in 1977 through 1981. Of its share of ANS sold in Alaska, all but a minor amount was sold to two small Alaskan refiners, Earth Resources Company of America ("ERCA"), which operates a refinery near Fairbanks, Alaska, and Tesoro Alaskan Petroleum Company, which operates a refinery in Kenai, Alaska. The remaining minor amount of Exxon's share of ANS sold in Alaska was sold to (1) four crude "topping plants" operated by Alyeska Pipeline Services Company to be used as fuel for the TAPS pipeline pump stations; (2) to Standard Oil of California ("Chevron") in 1977 at Valdez (one tanker load); and (3) to Golden Eagle, a Los Angeles refiner,

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*The ANS crude allocated to Exxon and available for sale is hereinafter referred to as "Exxon's share of ANS crude." This reference excludes a small quantity of oil used in Prudhoe Bay operations and includes Royalty-In-Value ("RIV") volumes, i.e., ANS volumes produced by Exxon and accrued to the State of Alaska as its share of production, then sold back to Exxon. For convenience, the figures set forth in this affidavit ignore the effects of pipeline and marine losses, except where otherwise indicated. (These losses aggregated less than one percent.)

which purchased 58,000 barrels at Valdez in a 1979 sale mandated by the federal government.

9. Attached hereto as Exhibit A is a table which depicts the relevant details of all sales of ANS crude in Alaska made by Exxon during the period 1977-1981.

10. As the following table demonstrates, virtually all of Exxon's share of ANS production (95.6% during the period 1977-1981) is transported by Exxon owned or chartered tankers out of Alaska to the Lower 48:

EXXON ANS VOLUMES TRANSPORTED OUT OF ALASKA BY EXXON CONTROLLED TANKERS
(In Barrels)

Year of Production	Exxon's Share of Total ANS Production	ANS Transported Out of Alaska	Percent
1981	103,680,774	100,583,330	97.0%
1980	109,664,566	106,556,818	97.2%
1979	95,972,460	89,871,344	93.6%
1978	80,246,756	75,130,952	93.6%
1977	22,568,452	21,655,384	96.0%
TOTAL	412,133,008	393,797,828	95.6%

11. During the period 1977-1981, approximately 72% of Exxon's share of ANS transported out of Alaska was delivered by Exxon owned or chartered tankers to Exxon's refineries at Benicia, California; Baytown, Texas; Baton Rouge, Louisiana; and Bayway, New Jersey. The remainder was transported out of Alaska by Exxon owned or chartered tankers and sold to or exchanged for non-ANS crude with customers in the Lower 48. As can be seen from the following table, the percentage of Exxon's total ANS production delivered to its refineries has increased and its sales to third parties decreased substantially since 1979:

Year of Production	Transported Out of Alaska	Delivered to Exxon Refineries	Deliveries to Refineries As Percentage of Total Exxon ANS Transported Out of Alaska	Lower 48 Sales/Exchanges for non-ANS
1977	21,655,384	11,283,479	(52%)	10,371,905
1978	75,130,952	33,829,305	(45%)	41,301,647
1979	89,871,344	43,456,188	(48%)	46,415,156
1980	106,556,818	99,873,440	(94%)	6,683,378
1981	100,583,330	93,040,827	(93%)	7,542,503
TOTAL ...	393,797,828	281,483,239	(72%)	112,314,589

12. Sales to third parties decreased after 1979 because of the expiration in January 1980 of contract sales to Chevron, which was by far the most significant purchaser of Exxon's share of total ANS production during 1977-1981. Chevron bought nearly 70% of the ANS crude Exxon sold to third parties during 1977-1981, but made no purchases after January 1980. Over 95% of the crude purchased by Chevron from Exxon was purchased on the West Coast of the United States for delivery by Exxon to Chevron's refineries at Richmond and El Segundo, California. Approximately 3.5% was purchased in Hawaii and delivered there by Exxon tankers in 1978 to a Chevron refinery. Attached hereto as Exhibit B is a table which depicts all of Exxon's ANS crude sales and ANS exchanges for non-ANS in the Lower 48 during the period 1977-1981.

13. As the tables on Exhibit B demonstrate, in addition to the Lower 48 sales to Chevron, during 1977-1981, smaller quantities of Exxon's ANS crude were sold to and/or exchanged for non-ANS crude on the West Coast with Sohio, Texaco, Continental Oil Company, Fletcher Oil Company, Tosco Corporation, and Derby and Company, Inc.; on the Gulf Coast, to Langham Petroleum Corporation, Marathon Oil Company, and the United States Strategic Petroleum Reserve; and to Commonwealth Refining in Puerto Rico pursuant to a sale man-

dated by the federal government. As with the Lower 48 Chevron sales, the crude sold to these parties was transported to its respective destinations in the Lower 48 by Exxon owned or chartered tankers.

14. In addition to Exxon's share of total ANS production delivered to its four refineries, Exxon also periodically purchases ANS crude from other producers, or receives ANS crude in exchange for non-ANS crude, and delivers these volumes to its refineries. During 1977-81, approximately 12% of the ANS crude oil so acquired by Exxon was purchased or received in exchange in Alaska. Virtually all of the ANS crude involved in these Alaskan transactions (over 95%) was purchased from ERCA at Valdez.* The remaining Alaskan transactions, which occurred only during 1980-1981, were small crude purchases/exchanges with one of the other Prudhoe Bay interest owners, Louisiana Land and Exploration Company.

15. Attached hereto as Exhibit C are three tables which depict, respectively, (1) the volumes of Exxon's share of ANS production delivered to each of its refineries; (2) the volumes of ANS crude purchased and/or received in exchange for non-ANS crude by Exxon which were delivered to each refinery; and (3) the total volumes

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*ERCA's Fairbanks refinery extracts light fractions (*e.g.*, gasoline, distillates) from the ANS crude which it processes, then returns the heavier fractions into TAPS where they are commingled with the much higher volume of ANS crude owned by others and destined for Valdez. Because ERCA has bought a full boiling range ANS crude, but returned the less valuable heavy components, ERCA makes payments which compensate all other shippers for the degradation which has occurred in their crude (as a result of ERCA's injecting the heavier fractions into TAPS at Fairbanks). ERCA then can sell to companies such as Exxon at Valdez (or elsewhere) an average quality ANS crude volume equal to the volume injected at Fairbanks.

of ANS from both of these sources delivered to each refinery.

16. ANS crude delivered to Exxon's four refineries is processed into a variety of petroleum products, primarily motor gasolines ("mogas"), jet fuels, distillates (which include heating oil, diesel oil and kerosene), and heavy fuel oils ("HFO"). Utilizing an extensive and elaborate combination of pipelines, rail cars, tank trucks, oceangoing vessels, and inland tugs, barges and tow boats, Exxon distributes products made at its refineries from ANS either through direct deliveries or exchanges to thousands of retail outlets. Exxon currently markets products throughout the United States in all states, except Alaska, Missouri, Kansas, Iowa and Hawaii.**

17. Products refined from ANS crude at Exxon's Benicia, California refinery supply Exxon customers in California, Oregon, Western Washington, Arizona and Nevada, either directly or through exchange. In a typical exchange, Exxon delivers to other companies Benicia product which has been refined and/or blended to the specifications of these other companies, which generally do not have refineries in the San Francisco area. In return, Exxon receives like amounts of product refined and/or blended to Exxon's specifications at locations such as Los Angeles, Portland and Seattle. From Exxon's standpoint, the primary purpose of these exchanges is to reduce the transportation costs incurred in supplying Exxon's customers with products. During the period 1978-1981, over 98% of the products refined at Benicia were produced from ANS crude. Attached hereto as Exhibit D is a table depicting for Exxon's refinery at Benicia for the years 1977-1981 the amount of ANS

**_De minimis_ sales of product have been made in Alaska.

processed and the approximate volumes of individual products refined from ANS crude.

18. Products refined from ANS crude at Exxon's Bayway, New Jersey, refinery supply Exxon customers in Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, New York, Central and Western Pennsylvania and New Jersey. In 1981, approximately 28% of the products refined at Bayway were produced from ANS crude. Attached hereto as Exhibit E is a table depicting for Exxon's refinery at Bayway for the years 1977-1981 the amount of ANS processed and the approximate volumes of individual products refined from ANS crude.

19. Exxon's two Gulf Coast refineries, located at Baytown, Texas and Baton Rouge, Louisiana, jointly supply the vast majority of products marketed by Exxon in the rest of its domestic market. In 1981, approximately 21% of the products refined at Baton Rouge were produced from ANS crude, and marketed in Louisiana, Mississippi, Tennessee, Kentucky, Ohio, North Carolina, South Carolina, Virginia, West Virginia, Georgia, Florida, Maryland, and Alabama, as well as in those states supplied by Exxon's Bayway, New Jersey refinery. In 1981, approximately 5% of the products refined at Baytown were produced from ANS crude and marketed in Texas, New Mexico, Oklahoma, Arkansas, Maryland, Delaware and Eastern Pennsylvania, as well as in those states supplied by Exxon's Bayway, New Jersey refinery. Attached hereto as Exhibits F and G are tables depicting for Exxon's refineries at Baytown and Baton Rouge for the years 1977-1981 the amount of ANS processed and the approximate volumes of individual products refined from ANS crude.

II
THE SUPPLY DEPARTMENT

A. *General Functions*

20. The Supply Department is a coordinative function of Exxon Company, U.S.A., with offices in Houston, Texas. All of Supply's personnel work in, and all of the Supply functions described in this affidavit are performed exclusively at Supply's Houston, Texas offices. At year-end 1981, the Supply Department had 273 employees.

21. By performing three primary functions for Exxon Company, U.S.A., the Supply Department plays a pivotal role in coordinating the many diverse activities conducted within Exxon and its affiliates to bring ANS crude to market. These three functions, all performed in Houston, are essential to the proper functioning of the system by which Exxon markets ANS crude and products refined therefrom:

> (a) arranging for the optimum and economical disposition of Exxon's crude (including ANS) and natural gas liquids production;
>
> (b) providing a smooth logistical interface between Exxon's production activities (including those in Alaska) and its refining, marketing and transportation activities; and
>
> (c) coordinating Exxon's "downstream" petroleum operations — *i.e.*, refining and marketing — to ensure that they are optimized economically and balanced physically (*i.e.*, that adequate crude and product supplies are available at all times where and when they are needed).

22. To accomplish these function, the Supply Department in Houston, in cooperation with the other departments and operating functions of Exxon, U.S.A., arranges

for the most favorable purchase, sale, exchange and transportation of crude oil, other petroleum raw materials, natural gas liquids, and, as needed, refined petroleum products, and various materials and services. From Houston, Supply negotiates and administers domestic supply arrangements for crude, natural gas liquids and clean fuel products (*e.g.*, gasoline, heating oil, other distillates, LPG). Working with Exxon International Company in New York, it also makes arrangements for and negotiates supplies of foreign source raw materials and products. Supply also provides near-term and long-range planning coordination, strategy development, and policy positions with respect to petroleum logistics (*i.e.*, transportation and storage of crude oil and products), and supply and demand.

23. From Houston, the Supply Department also provides purchasing services to Exxon Company, U.S.A. operating units (such as Production and Refining) and to Exxon Corporation regional and operating organizations (such as Esso Malaysia.) Supply's Traffic Division in Houston provides traffic coordination and negotiation services relating to air, rail, truck and certain inland water transportation contracts, tariffs and rates with third parties, and plans, coordinates and appraises the overall effectiveness of Exxon's third party traffic operations.

24. The Supply Department is unique among Exxon's functional departments and divisions in that much of its staff is drawn, often on a rotational basis, from throughout the entire Exxon organization, including Exxon's Production, Refining, Marketing, and Marine Departments, as well as Exxon Pipeline Company. The Supply Department concept permits — indeed, requires — the aggregation in one functional coordination department in Houston of individuals with widely diversified skills,

experiences and interests acquired in varied previous Exxon assignments, including assignments with Exxon International Company, and foreign affiliates such as Esso Europe. This concept facilitates interdisciplinary, interdepartmental problem solving and planning by a group with first-hand knowledge of individual Exxon functions, as well as an overview of the entire system. Unquestionably, Supply's principal asset is its experienced personnel. Without the interaction of people with knowledge of raw materials, Exxon's logistical needs and capabilities, and its refining and distribution processes, Supply's coordination efforts will not result in the efficiencies required for Exxon to compete successfully in today's highly competitive environment.

25. By focusing all crude, and much of Exxon's product coordination activity in one department in Houston, where production, transportation, refining and marketing elements can interact and iterate on a virtually constant basis, Supply is able to achieve significant economies through integration of Exxon's activities.

B. *Specific Functions*

26. The Supply Department's responsibilities are carrried out by its five divisions, whose work is performed in Houston, Texas, and is essential to the proper disposition of Exxon's crude and product supplies, including ANS crude and products refined therefrom:

(a) Operating Program Coordination ("OPC");

(b) Commerce;

(c) Planning;

(d) Purchasing; and

(e) Traffic.

27. From Houston, Supply's Operating Program Coordination, Planning and Commerce divisions are principally responsible for short and long range coordination of crude oil and petroleum products movements, crude oil processing and movement of bulk products for Exxon. OPC coordinates the development of monthly operating programs and quarterly plans for Exxon Company, U.S.A.'s petroleum logistics system. To carry out its logistics (supply and transportation) responsibilities, OPC:

(a) Forecasts the availability of domestic raw material for Refining and develops recommendations of crude oil nominations to state regulatory agencies;

(b) Works with the Refining Department in Houston and Exxon International Company in New York to establish an optimum plan for the operation of Exxon's U.S. and Caribbean refineries over the forward one to two seasonal years, taking into account Exxon's forecast supply and demand situation, company operating strategies, and the anticipated business and regulatory environment;

(c) Establishes optimum types and quantities of crude (both domestic and foreign) to be refined in Exxon's domestic refineries, and optimizes the schedule for their purchase, transportation and processing;

(d) Provides Marine and Exxon International Company with analyses of marine tonnage requirements and assists in the development of marine operating strategies;

(e) In cooperation with appropriate operating and support functions, prepares evaluations of short-term business arrangements (purchases, sales, exchanges, processing agreements) for management review;

(f) Participates in the development of major petroleum product supply contract bidding and pricing strategy;

(g) Coordinates development of forecasts of raw material costs for use in pricing strategy;

(h) Coordinates the day-to-day operation of the petroleum logistics system with Marketing, Refining, Marine and Exxon Pipeline Company;

(i) Schedules movements of raw materials and fuel products to maintain optimum inventories at Exxon USA's refineries and primary marketing terminals;

(j) Administers activities related to importation of crude and products, and export of products;

(k) Maintains records of historical data on Exxon's supply operations to prepare necessary reports of inventories, imports and other operations for transmission to federal, state and industry agencies;

(l) Furnishes to Exxon operating functions and the Controller's office consolidated short-term supply and demand information for use in preparing financial forecasts;

(m) Maintains liaison with Supply Planning and Exxon Company U.S.A. Corporate Planning to ensure that current operations are consistent with long-range plans; and

(n) Assists in the identification and assessment of industry, government, and public energy issues relating to petroleum supply operations, and participates in the development and implementation of appropriate policy statements, strategies and actions to deal with such issues.

28. From Houston, Supply's Commerce Division closely monitors and continuously analyzes the petroleum raw materials and product markets, and negotiates the sale, purchase and exchange of crude and products as required to meet the needs of the logistics system established by OPC. To carry out its responsibilities, Commerce:

(a) Develops with other Supply Department divisions and other Exxon Company, U.S.A. departments, particularly Refining and Marketing, strategies and programs of action in wholesale crude, gas liquids and clean products markets;

(b) Recommends prices to be paid for foreign and domestic crude oils, clean products and gas liquids, based on analyses of current market conditions;

(c) Negotiates and administers most agreements for the purchase, sale or exchange of crudes, condensates, gas liquids, and refined petroleum products and by-products between Exxon and other oil companies;

(d) Negotiates processing arrangements with other refiners and leases primary terminal capacity and product storage capacity in cooperation with appropriate functions;

(e) Maintains contacts with state agencies having regulatory powers over petroleum supply and often represents the Company in supply matters pending before such agencies;

(f) Identifies and assesses industry, government and public energy issues which affect commercial petroleum supply activities, and participates with other Supply Department divisions and other Exxon Company, U.S.A. departments in development and

implementation of Company policy statements, strategies and actions on such issues.

29. From Houston, Supply's Planning Division participates with other Supply Divisions and other Exxon Company, U.S.A. departments and affiliates in assessing future business conditions and market opportunities for petroleum. This group:

(a) Studies and develops optimum distribution plans to meet fuel product market demands and to optimize disposition of raw materials;

(b) Conducts studies of raw materials price strategy;

(c) Prepares forecasts of market prices of crude oil, other raw materials and major clean products;

(d) Develops operating strategy guides and criteria in such areas as inventory management, processing agreements, exchanges, and raw materials purchases and sales;

(e) Coordinates with other operating functions the development of new logistics systems and methods;

(f) Participates with the Marine Department and Exxon Pipeline Company in assessing long range transportation needs and in evaluating how best to fill them;

(g) Works with the Marine Department on long range tonnage requirements;

(h) Participates with other departments and Operating Program Coordination in establishing the attractiveness of intermediate and long-term petroleum business arrangements involving interfunctional considerations;

(i) Advises and assists other departments (particularly Refining, Marketing and Marine) with respect to evaluation of investments and operating strategies;

(j) Consolidates Company supply/demand forecasts to ensure compatibility of long-range petroleum plans;

(k) Coordinates with Exploration, Production and Synthetic Fuels Departments on preparation of long-range raw materials supply outlook;

(l) In connection with Exxon Company U.S.A.'s Corporate Planning Department, develops assessments and forecasts of industry refining and logistics capability and business and regulatory environment;

(m) Identifies and assesses industry, government, and public energy issues to determine their potential impact on Company operations in such areas as petroleum supply and demand, crude and product price and distribution matters, imports, refining capacity and utilization, oil movement systems, and interactions with the petrochemical industry, and participates in development and implementation of appropriate policy statements, strategies and actions to deal with these issues; and

(n) Provides mathematics, computing and systems support for all Divisions of the Supply Department.

30. From Houston, the Purchasing Division coordinates and renders advice to Exxon Company, U.S.A. and affiliates such as Exxon Pipeline Company in the purchase of materials and services, management of materials, inventory and disposal of surplus equipment. It also negotiates National and International supply contracts for large volume items such as tetraethyl lead and tubular equipment (pipe).

31. From Houston, the Traffic Division provides specialized and professional traffic services and advice to Exxon Company, U.S.A. and affiliated companies for the purchase from third parties and of time utilization of transportation by rail, truck, air cargo and dry cargo barge. In this role, Traffic manages truck and tank car movements of specialty products such as asphalt, lube oils, grease, solvents and numerous chemical products.

C. *Bringing ANS Crude to Market*

32. In fulfilling the functions previously described, Supply ensures the proper balance and functioning of Exxon's overall crude and product distribution and marketing system, which is essential to the profitable disposition of ANS crude and products refined therefrom. In the following paragraphs, examples of specific incidents of these functions which are particularly important to the transportation, refining, and marketing of ANS crude, are discussed. As with the general functions already discussed, these functions are performed entirely in Houston by Supply personnel.

33. Under Exxon's internal procedures, Exxon Company U.S.A.'s Production Department transfers responsibility for crude oil produced at the North Slope to the Supply Department at Pump Station No. 1. Thereafter, it is Supply — specifically, its Commerce Division — which is authorized, with management approval, to sell or exchange ANS crude. The Production Department does not sell Exxon's share of ANS crude.

34. Alaska oil is destination priced because there is no posted price at or near the wellhead. A posted price is a publicly advertised price which a purchaser is willing to pay for a given quality crude at a given location. Postings are impractical for ANS crude because the market for ANS crude in Alaska is so small.

35. In Houston, Supply's OPC Division obtains from Exxon's Production Department forecasts of ANS crude production provided by the Prudhoe Bay field operators. Utilizing this and other data, OPC coordinates with Exxon's Marine and Refining Departments, and the Exxon Pipeline Company, also all in Houston, to ensure that transportation to market and refining of Exxon's share of total ANS crude production proceeds in an efficient manner.

36. Except for the small volumes of ANS which have been sold at the North Slope to ERCA, OPC nominates Exxon's net share of ANS crude for transportation through "TAPS" to the port of Valdez. TAPS is operated by the Alyeska Pipeline Services Company, which acts as agent for the eight TAPS owners, each of which, including the Exxon Pipeline Company, operates its share of TAPS pipeline capacity as a federally-regulated common carrier. Each owner maintains its own government approved tariffs covering the terms of shipment over its share of TAPS capacity. Each week, shippers such as OPC desiring to pump ANS through TAPS teletype to Alyeska operations in Anchorage the volume of ANS crude they wish to ship, and under which TAPS' owners tariff schedule. The nominations are made for a six-weeks' period beginning two weeks after the submission date. If an owner's capacity is over-nominated, it is prorated among all shippers. The process iterates until all nominated volumes are accepted or the pipeline is full.

37. Acting for Exxon U.S.A., Supply retains ownership of ANS crude during transportation through the pipeline. Neither Alyeska nor any of the owner/common carriers assumes title or risk for the oil during transportation.

38. Working closely with Exxon's Marine Department, OPC coordinates and schedules the transfer of Exxon's ANS crude from the TAPS terminal at Valdez to Exxon's

owned and chartered tankers. OPC and Marine in Houston are in constant communication with respect to tonnage requirements at Valdez and the numerous factors affecting marine tonnage availability, such as waiting times at Valdez or the Panama Canal; delays caused by mechanical failures or weather conditions; changes in refining receiving needs and capabilities; and reduced availability of ships due to other shipping or shipyard repair needs. From Houston, OPC interacts constantly with Alyeska to insure that crude and dock space will be available at Valdez to permit prompt loading of tankers scheduled to receive Exxons' ANS crude. When necessary, as part of its logistics function, Supply will arrange time trades or exchanges of ANS crude at Valdez to avoid the excess storage charges imposed by Alyeska on TAPS shippers who fail to lift crude from Valdez within specified time periods. Occasionally, as discussed in Paragraph 8, *supra,* Supply has sold crude at Valdez. However, volumes sold at Valdez tend to be extremely small because prospective purchasers generally desire to purchase ANS crude on a delivered basis, and to leave the logistical problems to those — such as the staff of Exxon's Houston Supply Department — who deal with them on a regular basis.

39. During the transportation of Exxon's ANS crude through TAPS and on the high seas, Supply in Houston is constantly interacting with Exxon's Refining and Marketing Department in an attempt to match ANS crude availability to Refining's optimum crude slate, an optimum which, in turn, is regularly changing due to changes in refining processing capability and to varying product demands placed on the refineries. This balancing of crude supply with refining capability and market demand is a complex process requiring constant communication and exchange of information. For its part, the Refining Department in Houston develops the value of running vari-

ous crudes, including ANS, through each of its refineries, taking into consideration such factors as equipment availability, processing costs and values of petroleum products and by-products (*e.g.*, coke, gas, heavy fuel oil) which can be made from various processing sequences and crude slates. Taking these factors into account, computer programs are used to calculate product yields for each available crude oil, including ANS, enabling Supply and Refining to react quickly to changes in equipment availability, product yields and market prices. Supply works with the Refining Department and Exxon International Company in New York to evaluate the various crude sources available to Exxon on the domestic and world markets. Supply's domestic trading activities and intelligence together with the economic data provided by Exxon International Company provide the data base Supply uses to properly advise Refining on available crude supply. Using this information, Supply and Refining work together in Houston to optimize the crude and product slates and economics at each of Exxon's four refineries which process ANS crude.

40. Exxon's ANS crude is an integral part of the balancing process between crude supply and refining demand. In establishing this intricate balance, security of supply is an important and continuing consideration. The most secure crudes are those produced domestically in Alaska or in the Lower 48; their availability is relatively predictable. However, because available domestic crude volumes are insufficient to meet Exxon's total domestic refining needs, less secure foreign crude must also be imported to maintain refinery crude runs at levels which will satisfy customers' demands for products.

41. ANS crude has a great deal of logistical flexibility — more so than most domestic crudes — because it is shipped by water from Valdez. Consequently, it can often

be dispatched to any port where it may be needed on the West, Gulf or East Coasts, with destination decisions made by Supply from Houston while the crude is water borne.

42. From Houston, the Supply Department continually assesses the market for ANS crude in the West, Gulf and East Coasts markets and directs shipments of ANS crude to those markets where it is most needed by Exxon's refineries, or where it will achieve the highest price from third parties. Supply coordinates the decision making effort, including corporate management approval, that accompanies exchanges, time trades and sales of ANS crude.

43. From Houston, Supply coordinates the physical delivery of ANS crude to Exxon's refineries in California, Texas, Louisiana and New Jersey. Custody of the crude is transferred to the Refining Department when it crosses the flange at the refinery docks, but ANS crude (and all crude) remains on the books of the Supply Department until the crude is pumped from storage tanks to the refinery pipe stills for actual distillation and refining. In this manner, accountability for all ANS crude rests with the Supply Department from the time the crude enters Pump Station No. 1 on the North slope (or is purchased from third parties) until the time it is refined into products.

44. In addition to its balancing and coordination functions for Exxon's share of ANS crude, Supply also analyzes and, as appropriate, consummates purchases of ANS crude from third parties, as when it arranges for the purchase of the State of Alaska's royalty oil.

45. Supply's involvement with the logistics and balancing of ANS crude oil supply and demand does not end with the transfer of custody to ANS crude oil at the

refinery gate. From Houston, Supply coordinates the movement of petroleum products produced at Exxon's refineries to the numerous Exxon marketing terminals throughout the United States. Supply undertakes the transportation coordination function for the Marketing Department, which purchases most products from Refining at the refinery fence.

46. Once the optimum slate of raw materials has been moved into each refinery, and the proper mix of products manufactured, Supply must arrange for the prompt and economic distribution of refined products to over one hundred primary terminals and exchange supply points. A constant exchange of information between Supply, and the affected functions (Marketing, Marine, Pipeline, Refining), is needed regarding inventory levels, expected customer demands, future refinery production and pipeline, tanker and barge availability, so that Supply may make timely and economical decisions which result in products being available where and when needed by Exxon's customers. All of this Supply activity takes place in Houston.

47. Exxon currently markets petroleum products throughout the United States in all states except Alaska, Missouri, Kansas, Iowa and Hawaii.* Product movements are shown on Exhibit H. The light blue denotes areas where Exxon supplies products directly. Those areas where Exxon markets products obtained on exchanges are shown in yellow. Exxon does not market in those areas left in white.

48. While Exxon's refining capacity is heavily concentrated in the Gulf Coast, much of its product market lies along the Eastern Seaboard. Since the Exxon Bayway Refinery can only meet demands in its immediate tribu-

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*_De minimis_ sales of product have been in Alaska.

tary area, Supply must arrange for the deficit in the remaining Eastern areas to be met by product movements from the Gulf. In doing so, it strives to use the most economical method of getting products to the right terminals at the right time.

49. Common carrier product pipeline systems — Colonial and Plantation — are generally used to supply product in the corridor from Texas to New York State. Much of the Midwest and Appalachian area can be supplied by barge up the Mississippi, Ohio and Tennessee rivers. Coastwise deliveries of domestically refined products are made in those areas which can not economically be served from pipeline terminals. Foreign product imports consist largely of heavy fuel oil from the Caribbean, which are delivered along the coast for utility and industrial use, although small volumes of other foreign products are sometimes imported to meet special needs. The delivery systems tributary to Exxon's Rocky Mountain and West Coast refineries are not nearly as extensive or flexible. In these areas Supply must rely heavily on exchanges to serve its more distant customers. Exchanges cover geography for which direct supply would otherwise be economically prohibitive, and cover about 15 percent of Exxon's product sales. A great deal of Supply Department coordinative effort is required to negotiate to achieve favorable terms and keep volumes delivered in balance with volumes received in its numerous exchange agreements.

50. The coordination of products distribution is an iterative multi-functional coordination process involving a high level of knowledge and expertise on the part of Supply personnel in Houston responsible for the efficient and economical use of Refining equipment, storage tanks, Marine tankers and barges, product pipelines and Marketing terminals. Each day, even each hour, the process may iterate due to new information received in Houston

regarding the needs and limitations of this large logistics system. Operational upsets in refineries, pipelines, tankers and barges or terminals obviously call for adjustments to supply and transportation schedules. So will unusual weather. A cold spell, for example, may call for rerouting tankers from one destination to another, for heating oil to be pumped up a pipeline instead of gasoline, or for a purchase or exchange of product when on-time delivery of product from an Exxon refinery is difficult or very costly.

51. In each of the iterations of the Supply program, Supply is continually seeking opportunities to reduce costs and promote efficiencies in the transportation and distribution of crude and products. For example:

(a) When Exxon was faced with the need to transport its share of ANS from Alaska to the Lower 48, Supply conducted extensive studies in Houston to determine the most economical means of meeting the ANS transportation requirements, which included moving significant volumes of ANS crude to the Gulf and East Coasts as well as to the West Coast. When it became apparent that pipelines would not soon be built to move ANS crude from the West Coast to the East Coast, Exxon realized that a very large demand would be created not only for large tankers to carry ANS crude from Valdez to the West Coast, but also for smaller tankers to move ANS crude through the Panama Canal. Unless cost saving measures were taken, it was apparent that charter rates for the limited U.S. flag tanker fleet would increase significantly. The ultimate solution involved a substantial revamping of Exxon Company U.S.A.'s logistics system. To avoid increased tanker charter costs, Exxon built two tankers for West Coast service, the Exxon Benicia and Exxon North Slope, and transferred a number of other tankers in the 75,000 DWT range to

the West Coast trade. Because such vessels were too large to move through the Panama Canal, Supply negotiated a trans-shipping contract with Petroterminal de Panama, which built a terminal on the West Coast of Panama, where crude can be transferred to shore tankage and then to smaller vessels for movement through the Panama Canal to the Gulf and East Coasts. However, these smaller tankers were also anticipated to be in very short supply. On the basis of its analysis, Supply determined that the demand for small trans-Panama vessels could best be met by using Exxon tankers that were being used at that time to move fuel product from Exxon's Gulf Coast refineries to its East Coast marketing terminals. These tankers were removed from product service and retrofitted for ANS crude service. To replace the lost East Coast product transportation capacity, Supply developed a proposal which resulted in the construction of a new product terminal, and pipeline connections to link Exxon's Baytown, Texas refinery with the Colonial Product Pipeline. This permitted products which had been carried by Exxon product tankers from Baytown to the East Coast to travel through the Colonial Pipeline to supply Exxon customers in the Northeast United States. This solution involved the entire Exxon logistics system (tankers, pipelines, refineries and marketing terminals), and was significantly lower in cost than the alternative of relying entirely on spot or term charters in a tight tanker market.

(b) Supply recently negotiated a throughput agreement with Petroterminal de Panama whereby Exxon ANS crude will be carried via a Trans-Panama pipeline from Petroterminal's Pacific Coast terminal to the Atlantic Coast of Panama. By eliminating ship delays and Panama Canal tolls, as

well as reducing the number of tankers needed to transport ANS crude, this agreement will increase Exxon's logistical flexibility and reduce transportation costs.

Further Affiant sayeth not.

/s/ Thomas W. Gillette
Thomas W. Gillette

Subscribed and sworn to before me this 27th day of July, 1982.

/s/ James M. Small
Notary Public in and for
Kennebec County, Maine

My commission expires
6/10/89.

ANS CRUDE SALES AND DELIVERIES (IN EXCHANGE FOR NON-ANS CRUDE) MADE BY EXXON IN ALASKA 1977-1981 (BARRELS)

Purchaser	Location of Sale	Production Year 1977	1978	1979	1980	1981	Total
ERCA	North Slope	—	4,199,856	4,389,795	2,379,000	3,002,500	13,971,151
	Fairbanks	398,369	453,385	—	—	—	851,754
Tesoro	Nikishka	—	462,563	1,408,166	—	—	1,870,729
	Kenai	—	—	—	220,666	—	220,666
	Valdez (Incl. Exchange)	—	—	—	375,385	—	375,385
Golden Eagle[1]	Valdez	—	—	58,000	—	—	58,000
Chevron	Valdez	514,699	—	—	—	—	514,699
ARCO/Exxon Pipeline[2]	North Slope	—	—	245,155	132,697	94,944	472,796
TOTAL		913,068	5,115,804	6,101,116	3,107,748	3,097,444	18,335,180

[1]Government mandated sale, part of federal Mandatory Allocation Program ("MAP sale").

[2]Used for four crude "topping plants" to produce fuel for TAPS operations.

EXHIBIT A

ANS CRUDE SALES AND DELIVERIES (IN EXCHANGE FOR NON-ANS CRUDE) MADE BY EXXON IN THE LOWER 48 STATES 1977-1981 (BARRELS)

Purchaser	Location of Sale	Production Year 1977	1978	1979	1980	1981	Total
Chevron	San Francisco (Richmond Refinery)	5,441,299	22,899,625	24,499,438	137,684	—	52,978,046
	Long Beach (El Segundo Refinery)	4,930,606	13,321,182	14,004,593	—	—	32,256,381
	Hawaii	—	3,241,525	—	—	—	3,241,525
Conoco	Long Beach	—	1,089,615	3,583,000	2,846,589	734,702	8,253,906
Fletcher	Long Beach	—	249,498	3,756,273	1,873,032	—	5,878,803
Sohio	San Francisco	—	247,294	—	—	—	247,294
Tosco (Lion)	Long Beach	—	—	571,852	—	—	571,852
Texaco	Long Beach	—	252,908	—	—	—	252,908
Derby (Exchange)	Long Beach	—	—	—	595,399	799,586	1,394,985
SPR (DOE) Sales	St. James	—	—	—	—	5,401,236	5,401,236
Langham	Pt. Arthur	—	—	—	—	90,096	90,096
(Exchange)	St. James	—	—	—	—	377,780	377,780

EXHIBIT B-1

Purchaser	Location of Sale	Production Year 1977	1978	1979	1980	1981	Total
Marathon (Exchange)	Garyville	—	—	—	—	139,103	139,103
Commonwealth of Puerto Rico (Map Sale)	Puerto Rico	—	—	—	1,230,674	—	1,230,674
TOTAL		10,371,905	41,301,647	46,415,156	6,683,378	7,542,503	112,314,589

EXHIBIT B-2

1. Volumes of Exxon's Shares of ANS Delivered to Each Exxon Refinery

Year of Production	Benicia, California	Baytown, Texas	Baton Rouge, Louisiana	Bayway, New Jersey	Total
1977	11,283,479	—	—	—	11,283,479
1978	29,728,077	1,676,934	1,167,426	1,256,868	33,829,305
1979	34,845,544	1,278,399	5,068,983	2,263,262	43,456,188
1980	38,410,264	5,016,212	34,729,872	21,717,092	99,873,440
1981	34,281,518	6,379,105	28,038,484	24,341,720	93,040,827
Total	148,548,882	14,350,650	69,004,765	49,578,942	281,483,239

EXHIBIT C-1

2. Volumes of ANS Crude Purchased and/or Received in Exchange for Non-ANS Crude and Delivered to Exxon Refineries

Refinery	Production Year 1977	1978	1979	1980	1981	Total
PURCHASES						
Benicia	4,148,334	4,624,013	4,174,491	624,290	1,150,261	14,721,389
Baytown		3,839,977		35,130	12,057	3,887,164
Baton Rouge	5,193,937	19,679,395	18,625,954	276,260	160,630	43,936,176
Bayway		3,746,285		168,242	126,264	4,040,791
RECEIPTS						
Benicia				130,509		130,509
Baytown			327,306	73,290	461,017	861,613
Baton Rouge		818,137	5,376,661	1,142,620	3,218,845	10,556,263
Bayway				15,392	50,257	65,649
Total						
Purchases	9,342,271	31,889,670	22,800,445	1,103,922	1,449,212	66,585,520
Receipts		818,137	5,703,967	1,361,811	3,730,119	11,614,034
GRAND TOTAL	9,342,271	32,707,807	28,504,412	2,465,733	5,179,331	78,199,554

EXHIBIT C-2

3. Total Volumes of ANS Delivered to Each Exxon Refinery

Refinery	Production Year					Total
	1977	1978	1979	1980	1981	
Benicia	15,431,813	34,352,090	39,020,035	39,165,063	35,431,779	163,400,780
Baytown		5,516,911	1,605,705	5,124,632	6,852,179	19,099,427
Baton Rouge	5,193,937	21,664,958	29,071,598	36,148,752	31,417,959	123,497,204
Bayway		5,003,153	2,263,262	21,900,726	24,518,241	53,685,382
Total	20,625,750	66,537,112	71,960,600	102,339,173	98,220,158	359,682,793

EXHIBIT C-3

Exxon's Benicia, California Refinery
ANS Crude Processed/Approximate Volumes of Individual Products Refined from ANS

	Crude — Processed at Refinery			Products Refined from ANS		
	Total MB/D	ANS MB/D	Percent	Product	Approx. MB/D	Areas Supplied
1981	100	100	100	Mogas	66	(California
				Jet	12	(Oregon
				Distillates	9	(Washington
				HFO	4	(Arizona
						(Nevada
1980	107	107	100	Mogas	72	
				Jet	12	
				Distillates	10	
				HFO	6	
1979	98	98	100	Mogas	69	
				Jet	12	
				Distillates	7	
				HFO	4	
1978	92	90	98	Mogas	57	
				Jet	12	
				Distillates	7	
				HFO	4	
1977	90	34	38	Mogas	24	
				Jet	4	
				Distillates	3	
				HFO	—	

EXHIBIT D

Exxon's Bayway, New Jersey Refinery

ANS Crude Processed/Approximate Volumes of Individual Products Refined from ANS

	Crude — Processed at Refinery			Products Refined from ANS		
	Total MB/D	ANS MB/D	Percent	Product	Approx. MB/D	Areas Supplied
1981	217	61	28	Mogas	25	(New York
				Jet	5	(Pennsylvania
				Distillates	10	(New Jersey
				HFO	12	(Maine
						(New
1980	237	58	24	Mogas	22	(Hampshire
				Jet	5	(Vermont
				Distillates	11	(Massachusetts
				HFO	11	(Rhode Island
1979	241	2	1	Mogas	1	(Connecticut
				Jet		
				Distillates	1	
				HFO		
1978	285	14	5	Mogas	6	
				Jet	1	
				Distillates	3	
				HFO	2	
1977	279	0	0	Mogas		
				Jet		
				Distillates	0	
				HFO		

EXHIBIT E

Exxon's Baytown, Texas Refinery

ANS Crude Processed/Approximate Volumes of Individual Products Refined from ANS

	Crude — Processed at Refinery			Products Refined from ANS		
	Total MB/D	ANS MB/D	Percent	Product	Approx. MB/D	Areas Primarily Supplied (Except distillates and HFO)
1981	350	18	5	Mogas	6	(Texas
				* Jet	1	(New Mexico
				* Distillates	3	(Oklahoma
				** HFO	3	(Arkansas
						(Eastern Pennsylvania
1980	384	9	3	Mogas	3	(Maryland
				* Jet	1	
				* Distillates	2	
				** HFO	2	
1979	457	4	1	Mogas	1	
				* Jet)		
				* Distillates	3	
				** HFO)		
1978	542	15	3	Mogas	5	
				* Jet	1	
				* Distillates	3	
				** HFO	3	
1977	458	0	0	Mogas)		
				* Jet)		
				* Distillates)	0	
				** HFO)		

* Most distillates and some jet fuel produced at Exxon's Baytown refinery are transported to Exxon's Bayway refinery where they are commingled with distillates and jet fuel made there. These products are then marketed in those states supplied by Exxon's Bayway refinery. *See* Exhibit E.

** HFO produced at Exxon's Baytown refinery is generally used for ship bunkering and to supply utilities in the

Exxon's Baton Rouge, Louisiana Refinery
ANS Crude Processed/Approximate Volumes of Individual Products Refined from ANS

	Crude — Processed at Refinery			Products Refined from ANS		
	Total MB/D	ANS MB/D	Percent	Product	Approx. MB/D	Areas Primarily Supplied (Except HFO)
1981	409	85	21	Mogas	35	(Louisiana
				* Jet	9	(Tennessee
				* Distillates	19	(Ohio
				** HFO	1	(North Carolina
						(South Carolina
						(Virginia
1980	468	97	21	Mogas	40	(West Virginia
				* Jet	9	(Georgia
				* Distillates	19	(Florida
				** HFO	2	(Mississippi
						(Alabama
1979	481	71	15	Mogas	30	(Maryland
				* Jet	7	
				* Distillates	13	
				** HFO	2	
1978	467	59	13	Mogas	25	
				* Jet	6	
				* Distillates	10	
				** HFO	2	
1977	474	13	3	Mogas	5	
				* Jet	1	
				* Distillates	2	
				** HFO	—	

* Distillates and jet fuel produced at Exxon's Baton Rouge refinery are also transported to Exxon's Bayway refinery where they are commingled with distillates made there. These products are then marketed in those states supplied by Exxon's Bayway refinery. *See* Exhibit E.

** HFO produced at Exxon's Baton Rouge refinery is generally used for ship bunkering and to supply utilities in the United States Gulf Coast states, primarily Louisiana and Florida.

EXHIBIT G

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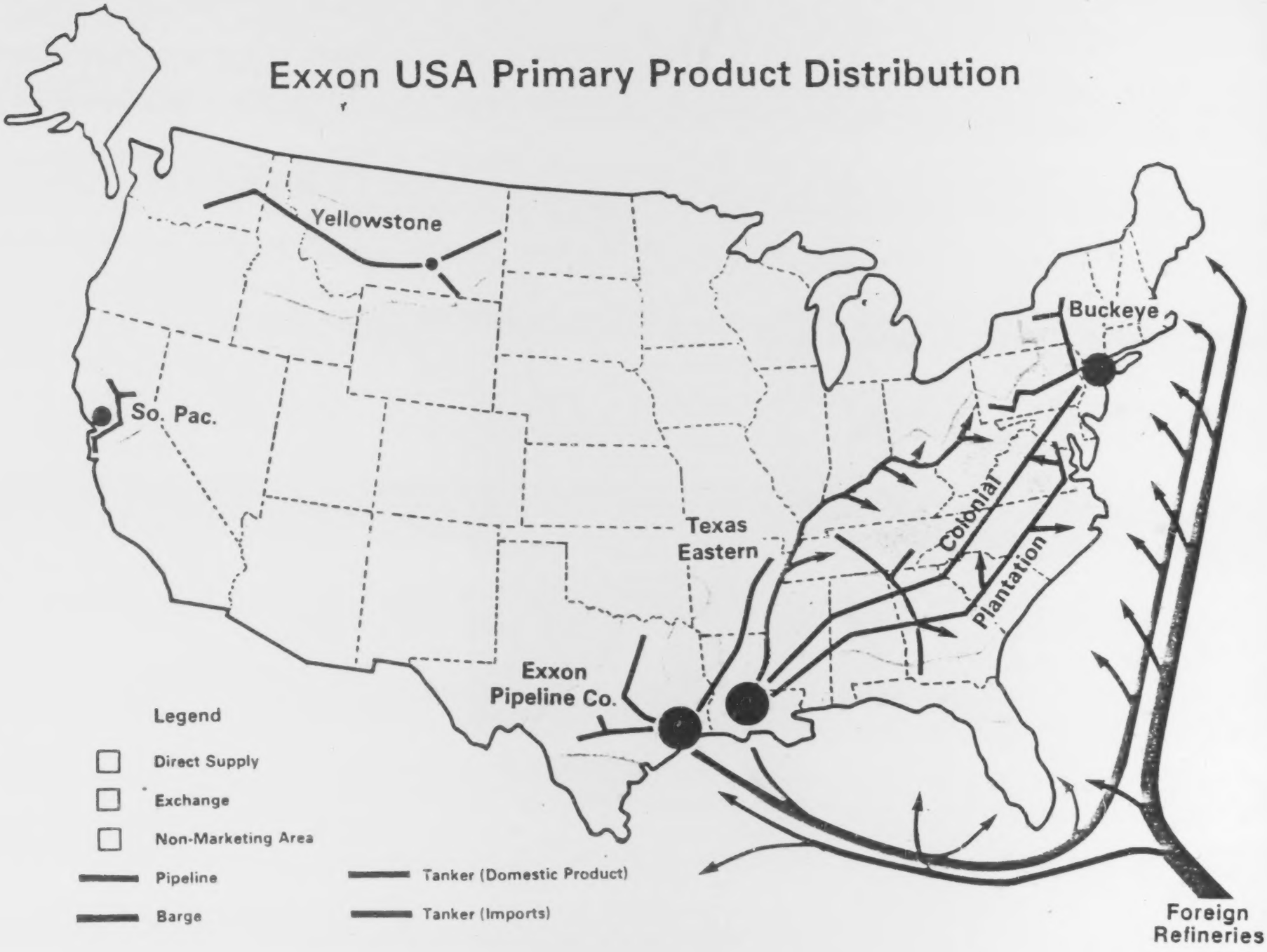
EXHIBIT II

Exxon USA Primary Product Distribution



J. SOHIO FACT SUMMARY

IN THE SUPERIOR COURT
FOR THE
STATE OF ALASKA
THIRD JUDICIAL DISTRICT AT ANCHORAGE
No. 3AN-79-1903 Civ.
No. 3AN-80-1542 Civ.

ATLANTIC RICHFIELD COMPANY, *et al.*,
Plaintiffs,

v.

STATE OF ALASKA, *et al.*,
Defendants.

EXXON CORPORATION, *et al.*,
Counterclaimants,

v.

STATE OF ALASKA, *et al.*,
Defendants on Counterclaim.

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FOR THE
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Counterclaim.

SOHIO FACT SUMMARY

I. *Introductory Statement*

This summary of the affidavits and exhibits* filed herewith on behalf of Sohio** is intended to serve three related purposes. First, it demonstrates that the generalized factual statements included in the Taxpayers' Joint Brief in Opposition to Motion for Summary Judgment and Statement of Genuine Issues of Material Fact (the "Taxpayers' Brief") are true vith respect to Sohio. Second, it explains that many of the factual premises underlying the arguments of the State of Alaska (the "State") in this litigation are faulty. Third, it serves as a road map to the Sohio affidavits.

II. *Overview*

As explained in the Taxpayers' Brief, to understand the real issues in this case it is necessary to know something

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*The affidavits filed herewith on behalf of Sohio are referred to herein by the name of the affiant and with a reference to the paragraph number of the affidavit, e.g., (Adam ¶). The exhibits referred to herein are bound in a separate volume and are referred to by exhibit number, e.g., (Sohio Exhibit). The State of Alaska's responses to the Taxpayers' Joint Requests for Admission and Interrogatories are referred to as: (R. for A.); the depositions of the State's witnesses and affiants are referred to as: (Deakin Depo. p.); the affidavits filed on behalf of the State are referred to by the name of the affiant and the paragraph number of the affidavit: (Deakin Aff. ¶); and the State's answer to the Amended Complaint of Sohio Alaska Petroleum Company, Sohio Pipe Line Company, and BP Alaska Inc. is referred to as: (Answer to Sohio Complaint ¶).

**As used herein, the term "Standard Oil" refers to The Standard Oil Company, an Ohio corporation. Standard Oil and its subsidiaries are referred to herein collectively as "Sohio." Sohio and the other plaintiffs and counterclaimants in this litigation are referred to herein collectively as the "Taxpayers."

about the process of production and sale of Alaska North Slope ("ANS") crude oil, and about the ways that Sohio's income from the production and disposition of ANS crude oil was taxed by Alaska under AS 43.21 (the "Oil Tax Act") during 1978-1981 and by other states under their statutes. As the Taxpayers' Brief points out, four points are important: each of those points is true with respect to Sohio.

First. Sohio's income from production of ANS crude oil comes from sales of that oil in states other than Alaska. During 1978-1981, only 1.6% of Sohio's ANS crude oil was sold in Alaska for consumption in Alaska. (Schreiner ¶ 28). But for out-of-state markets, as the State has admitted, little crude oil would be produced in Alaska. (Answer to Sohio Complaint ¶ 11). The State has also admitted that Sohio's income from production of ANS crude oil is not realized until a sale occurs. (R. for A. 89). See Section III below.

Second. Sohio's income from the production and sale of ANS crude oil is attributable to countless activities in states other than Alaska and in other parts of the world. Such activities range from the worldwide exploration efforts of The British Petroleum Company p.l.c. ("BP") to the fabrication of production facilities in California; and from the financing of the Prudhoe Bay field, the Trans Alaska Pipeline System ("TAPS"), and the fleet of Sohio leased tankers in Cleveland, New York City and elsewhere to the centralized management and support functions without which the oil could not be profitably disposed of in California, Puerto Rico, and other locations thousands of miles from Alaska. See Section IV below.

Third. Despite the contributions other states make to Sohio's income from production and disposition of ANS crude oil, the Oil Tax Act allocates 100% of that income to

Alaska. (Tanner ¶¶ 7, 10). The resulting level of taxation of Sohio by the State is staggering. According to the State, Sohio provided 17% of the State's Total Adjusted State Revenue in 1978. That percentage increased to 27% in 1979, to 41% in 1980, and to 43% in 1981. (R. for A. 49(a)). The State thus looked to Sohio in 1980 and 1981 for more than $40 out of every $100 it took in. In Fiscal Year 1981, moreover, Sohio alone paid over half of all income taxes collected from everyone by the State of Alaska! See Section V below.

Fourth. All the other states where Sohio does business are entitled to, and many do, tax a share of the income Alaska allocates to itself. As a result, Alaska has subjected Sohio to significant multiple taxation — the clearest symptom of the Oil Tax Act's unconstitutionality. For 1978, the aggregate amount of income on which Sohio was taxed by Alaska and other states amounted to 175% of Sohio's consolidated federal taxable income, before deduction of net operating loss carryforwards and state income taxes. (Tanner ¶ 8).

Sohio is exposed to a risk of substantially more multiple taxation than it has experienced to date. If each state in which Sohio does business had chosen to tax Sohio on a unitary basis, using formula apportionment, the multiple taxation of Sohio's income taxed under the Oil Tax Act would have amounted to approximately 149% in 1978, 171% in 1979, and 168% in 1980. (Tanner ¶ 13). See Section VI below.

III. *Sohio's Income is Derived from Sales and Exchanges of ANS Crude Oil Outside Alaska*

Sohio owns about half of the oil reserves in the Prudhoe Bay field (Newton ¶ 28) and has an interest in the Kuparuk field as well. (Newton ¶ 38. See Sohio Exhibit 12.)

The percentage of Sohio's ANS crude oil sold in Alaska is small. During the period 1978-1981, only 1.6% of Sohio's ANS crude oil was sold in Alaska for consumption in Alaska. (Schreiner ¶ 28). The State has admitted that "most of the crude oil produced in Alaska is destined for out-of-state markets. But for the existence of such markets, little crude oil would be produced in Alaska." (Answer to Sohio Complaint ¶ 11. See also R. for A. 84, 128).

During 1978-1981, approximately 47% of Sohio's ANS production was placed by sale or exchange on the West Coast of the United States and 37% was placed on the East or Gulf Coast or in the Caribbean. (Schreiner ¶¶ 25-26).

After oil obtained by Sohio through exchanges of its ANS crude oil is refined at its refineries in Ohio and Pennsylvania (Shanahan ¶ 15(A), (L)), the refined petroleum products are marketed by Sohio in 16 eastern and midwestern states and the District of Columbia. None of these sales occurs in Alaska, since Sohio does not market refined products there. (Schreiner ¶ 22).

IV. *Sohio's Income From the Production and Sale of ANS Crude Oil is Attributable to a Myriad of Activities in States Other Than Alaska*

As the Taxpayers' expert affiants point out, Alaska's principal contribution to the income generated from the production and sale of ANS crude oil is the presence of oil within the State. That is a vital contribution; but oil that is undiscovered, or that cannot be produced, or that cannot be transported and sold or used does not generate income. Oil is converted into income by the cooperative efforts of people in well-managed organizations who find oil, develop oil fields, provide ships, and place the oil where it will bring the top dollar.

The affidavits filed on behalf of Sohio, summarized below, demonstrate that Sohio engages in each of these activities and that most of such activities take place outside Alaska. The Sohio affidavits confirm what the State has conceded: that these activities are part of the operations of a unitary business.

A. *Finding the Oil*

1. *BP Exploration in Alaska, 1959-1969*

The history of BP exploration activities in Alaska from 1959 through 1969 is discussed in the Adam affidavit, ¶¶ 4-16. BP began intensive exploration operations in Alaska during 1959, but it was not until 1969 that it discovered oil in commercial quantities on Alaska's North Slope. While drilling and related exploration operations were naturally conducted in Alaska, the direction of those operations and the evaluation of geological and geophysical data, economic analysis of prospective areas and lease sales, and exploration oversight and coordination took place outside Alaska. (Adam ¶ 15).

The experience and expertise of BP's worldwide organization were brought to bear on BP's exploration efforts in Alaska. Most of the geologists, geophysicists and paleontologists were "seconded" (loaned) from BP's London offices, and specialist and research facilities in geology and geophysics were provided by the Sunbury Research Centre in London. (Adam ¶¶ 7, 16).

2. *BP and Sohio Exploration Efforts, 1970 to Date*

The Alaska exploration efforts of BP and Sohio during the period 1970-1981 are discussed in the Lewis affidavit, ¶¶ 4-14. Pursuant to operating agreements between Sohio and BP Alaska Inc. ("BP Alaska"), then a wholly-owned subsidiary of BP, BP Alaska was named as the operator of the Prudhoe Bay and other Sohio leases in Alaska; and BP Alaska also carried out Sohio's exploration activities

in Alaska. (Newton ¶¶ 9, 11). During most of the period from 1970 to date, BP Alaska Exploration Inc. ("BPAE") has been the BP subsidiary engaged in exploration in Alaska. Until 1977, BPAE's staff was provided, and its operations were carried out, through BP Alaska pursuant to the "BP-BP Alaska Services Agreements" discussed in the Newton affidavit. The BPAE staff during the early 1970s was largely composed of personnel recruited from BP in London. (Lewis ¶¶ 4, 5; Newton ¶¶ 14, 26).

Although project supervision was naturally carried out on site, the BPAE/Sohio exploration efforts were directed from, and exploration planning, design engineering and most geological and geophysical services were carried out in, New York during 1970-1974 and San Francisco during 1974-1977. (Lewis ¶¶ 4, 9).

BP's experience and expertise were available to the Sohio/BPAE exploration efforts in Alaska during 1970-1977. BP's experience in high technology areas of geophysics and offshore engineering was particularly helpful. Its research in geophysics made a major contribution to understanding seismic results in the permafrost areas of north Alaska, and BP's experience as a leading operator in the North Sea provided invaluable assistance in planning for offshore lease sales in both the Gulf of Alaska and Lower Cook Inlet, where similarly hostile weather conditions prevailed. (Lewis ¶ 10; Newton ¶ 26).

For reasons discussed in the Newton affidavit, ¶¶ 31-35, the common stock, staff, and operating responsibilities of BP Alaska were transferred to Sohio as of January 1, 1978. Thereafter, BP provided to Sohio from London technical support, advice, and services related to exploration and production operations. (Newton ¶ 33). BPAE, still a wholly-owned subsidiary of BP, has continued to be involved in exploration activities in Alaska since 1978,

including a number of joint projects with Sohio. (Newton ¶¶ 35, 37-38; Lewis ¶¶ 11-14).

BPAE and Sohio acquired a number of leases in the Beaufort Sea lease sale in December 1979 and have drilled several wells in the Beaufort Sea. Technology developed in Canada has been relied upon in Beaufort Sea drilling efforts, and Sohio and BPAE have employed consultants from Canada, the lower 48 states, and Japan in connection with exploration in the Beaufort Sea. Minimal exploration expertise has been obtained from Alaska sources. (Lewis ¶ 13).

3. *Functions of Sohio Exploration Group in San Francisco*

The organization and functions of the Sohio Exploration Group in San Francisco during the period 1978-1981 are discussed in the Lewis affidavit, ¶¶ 19-20. Except for its regional departments, which had operating responsibilities, the Sohio Exploration Group in San Francisco was generally responsible for all of Sohio's exploration planning and design engineering. Those responsibilities included initial mapping and geological and geophysical studies conducted with respect to prospective areas, the evaluation of data derived from such studies, and the acquisition of leases in areas that appeared to be promising. Subject to expenditure authority limits, the decision of whether to proceed beyond the initial evaluation stage in any particular area was made in San Francisco. (Lewis ¶ 19).

Sohio personnel outside BP Alaska and the San Francisco Exploration Group, including Government Affairs and Public Affairs personnel in Anchorage, Cleveland, and Washington; Sohio Law Department personnel in San Francisco, Anchorage and Cleveland; and Materials Management personnel in San Francisco have been in-

volved in various aspects of Sohio's Alaska exploration efforts. (Lewis ¶ 14).

4. *Risks Associated with Exploration*

The history of exploration in Alaska demonstrates that not all exploration activities are successful. It is the occasional successful exploration effort, which results in the discovery of a good field, that enables a company to continue investing in further exploration and pays for exploration efforts that fail entirely or for fields that are marginal. Prudhoe Bay is the product of one of the successful efforts. It is a discovery of that magnitude which makes it possible for companies to have participated over the years in unsuccessful exploration efforts in Alaska and elsewhere around the world and to have continued to explore in Alaska despite its remoteness and harsh climate. (Lewis ¶ 15).

In evaluating areas for exploration, it is necessary to go beyond the costs of exploration alone. The cost of converting a discovery into a producing field that is economically successful must also be considered. In order to convert the discovery at Prudhoe Bay into a producing field, for example, it was necessary to undertake the engineering and construction of TAPS, the development of a tanker fleet to transfer the crude oil from Valdez to the lower 48 states, and the development of production facilities for the field itself. (Lewis ¶ 16).

Both the costs and risks of exploration in Alaska are higher than in other parts of the world. Thus, as a practical matter, only integrated companies with income from other sources and exploration programs that spread the risk of unsuccessful exploration through geographic diversification can afford to engage in substantial exploration efforts in Alaska. Moreover, because of its location and climate, the cost of field development requires a

discovery to be larger in Alaska than in other parts of the world to be economically viable. (Lewis ¶ 17).

Exploration is typically the riskiest of an oil company's activities, and it is an especially costly activity in Alaska. Companies that explore for oil in Alaska must aim for a high return. For a variety of reasons, that is even more true today than in the past. For example, the cost of money and the rate of inflation are higher than they have been historically. (Lewis ¶ 18).

Another risk factor used in evaluating anticipated returns on exploration is the likelihood of stability in the applicable federal and state tax systems. This affects the predictability of rates of return on successful exploration activities. The tax risk factor, in and of itself, can be of critical importance in deciding whether to go forward with an exploration project that is evaluated as marginal. (Lewis ¶ 18).

B. *Creating a Vehicle for Managing and Financing the Development of the Discovery*

1. *The BP-Sohio Transaction*

In 1968, with the discovery by Atlantic Richfield Company ("ARCO") and Exxon Corporation of a major oil field on the Prudhoe Bay structure, it became apparent that BP's Prudhoe Bay leases probably contained major reserves of crude oil. From the outset, BP's objective was to take American shareholders into partnership and to obtain the best possible American management at the earliest possible date rather than to continue to operate in North America through a wholly-owned subsidiary of BP. This policy was adopted on general grounds, particularly because of the managerial, financial, and operational problems that would be encountered in building up an integrated operation from nothing in the United States. It

was decided that Standard Oil was the ideal partner. (Adam ¶¶ 19-22).

Discussions between BP and Standard Oil led to a memorandum of intent dated June 2, 1969, and eventually to the agreement dated August 7, 1969 between BP, British Petroleum (Overzee) N.V., a wholly-owned Netherlands subsidiary of BP, and Standard Oil (the "BP-Standard Oil Agreement"). (Adam ¶ 22). With the BP-Standard Oil transaction, the burden of financing the development of the Prudhoe Bay field rested with Standard Oil. (Adam ¶ 24). As discussed above and in the Newton affidavit, ¶¶ 19-38, since 1970 BP and Standard Oil have cooperated closely in connection with the development of their interests in Alaska.*

2. *Financing the Development of the Prudhoe Bay Field and the Means of Transporting ANS Crude Oil*

The McGimpsey affidavit explains that massive financings were required to fund Sohio's share of the costs of developing the Prudhoe Bay field from 1970-1977, the construction of TAPS from 1974-1977, and the construction of six marine tankers in 1977-1978. Those financings were the responsibility of the Finance Department at Sohio's Cleveland, Ohio headquarters. All financial planning, decision-making, and activities related to the financing of Sohio's operations in Alaska involved Sohio personnel located in Cleveland. The only contacts between Alaska and Sohio's financing efforts were in connection with the issuance in 1977 of the City of Valdez, Alaska Marine Terminal Revenue Bonds — bonds that were guaranteed by Sohio — and a very minor contact in

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*The relationship between BP and Standard Oil is discussed in the Adam affidavit, ¶¶ 26-32. The relationship between BP, Standard Oil, and their subsidiaries involved in Alaska operations as of various dates during 1970-1981 is shown on Sohio Exhibits 3, 4, 7, 10, and 11.

connection with a revolving credit and term loan agreement in 1976. (McGimpsey ¶¶ 9, 12, 32).

But for the creditworthiness of Sohio's operations outside Alaska and the financial markets that exist in the lower 48 states, combined with the inherent economics of the project, it would not have been possible for Sohio to finance its share of the cost of developing Prudhoe Bay, constructing TAPS, and constructing six marine tankers. Sohio was required to dedicate to the Alaska venture a substantial portion of its cash flow from activities outside Alaska, and it had to reduce its planned capital expenditures in other parts of the country. (McGimpsey ¶ 12).

The capital outlay of all of the participants for facilities to develop and transport ANS crude oil to market totaled approximately $15 billion. Sohio's financing program, involving approximately $5.7 billion, is summarized on Sohio Exhibit 35 and is discussed in the McGimpsey affidavit, ¶¶ 13-39. That financing program, which was primarily implemented during the period 1974-1977, was, and is, the largest private financing program ever completed. The cornerstone of the financing program undertaken by Sohio was a $1.75 billion private placement of debt in 1975. None of the lenders that participated in that private placement was an Alaska financial institution. (McGimpsey ¶ 25).

C. Developing the Prudhoe Bay Field

1. *Lower 48 Direction of the Development of the Prudhoe Bay Field*

The development of the Prudhoe Bay field, discussed in the Goff affidavit, began in 1969 when a small team of personnel from BP was transferred from BP in London, England to Houston, Texas to supervise the engineering and construction firm that originally served as the managing contractor under the Alaska North Slope Project

Agreement with BP Alaska. The BP Alaska Houston staff reported to the BP Alaska offices in New York City between 1969 and 1974. Construction operations related to the development of Prudhoe Bay were transferred to the West Coast, and the offices of BP Alaska were moved to San Francisco during 1974. (Goff ¶ 4; Newton ¶ 25).

The Alaska North Slope Project team of BP Alaska became the Engineering Division of Sohio Petroleum Company ("SPC") in 1978 and, ultimately, Sohio Construction Company ("SCC"). In 1978, SPC assumed the responsibility for construction management from BP Alaska. SCC now provides project and engineering support for SPC and continues to perform the construction management function for all Sohio facilities required for the Prudhoe Bay field, the west side of which is operated by Sohio. (Goff ¶ 5).

2. *Fabrication of Production Facilities in the Lower 48 States*

Most of Sohio's major facilities at Prudhoe Bay, including the Base Operations Center, Gathering Centers 1, 2, and 3, the Central Power Station, and the Fuel Gas Plant, are comprised of modules or units that are connected together to make the entire facility. With the exception of a few minor modules, the Prudhoe Bay modules were constructed at fabrication sites located in the lower 48 states. See the photographs marked as Sohio Exhibits 24-27. Some of the other Prudhoe Bay facilities were partially prefabricated in the lower 48 states. All Prudhoe Bay facilities were designed and engineered in the lower 48 states. (Goff ¶¶ 6, 9-10, 16).

The production facilities were and are transported to Prudhoe Bay in annual sealifts from the lower 48 states that take place during the six-week period during the summer when the Arctic Ocean ice moves offshore. See

the photographs marked as Sohio Exhibits 28-33. (Goff ¶ 13-14).

The magnitude of the fabrication activity undertaken in the lower 48 states in connection with the development of Prudhoe Bay since 1970 is illustrated by Sohio Exhibit 34, which summarizes the annual Sohio sealifts during 1970-1981 and includes the sites where the production facilities were constructed and where the sealift originated each year, the number of barges involved in each sealift, the number of major modules transported in each sealift, the approximate tonnage transported in each sealift, and a brief description of the Prudhoe Bay production facilities transported to Prudhoe Bay in each sealift. Sohio Exhibit 34 does not reflect the annual ARCO sealifts to Prudhoe Bay. (Goff ¶ 15).

Although the cost of transporting the fabricated production facilities to Prudhoe Bay in the annual sealifts is significant, the fabrication of most of the Prudhoe Bay production facilities in the lower 48 states results in significant cost savings. The cost of performing construction operations on the North Slope of Alaska is several times the cost of performing the same operations in the lower 48 states. Apart from the cost of transporting material to Prudhoe Bay, labor costs are much higher on the North Slope, the severe weather and other factors reduce productivity, and North Slope construction operations involve the significant indirect costs of housing and other support and transportation of personnel. (Goff ¶ 11).

The fabrication of Prudhoe Bay production facilities in the lower 48 states is an example of an operation that can be carried out more efficiently outside Alaska, thereby lowering expenses and increasing the amount of income taxed under the Oil Tax Act, while at the same time exposing Sohio to taxation in states such as California.

3. *Sohio Construction Functions*

As explained above, SCC performs all engineering and construction managment related to Prudhoe Bay facilities, and the bulk of this work is performed at West Coast locations in the lower 48 states. (Goff ¶ 16).

The functions of the principal departments within SCC since its formation in March 1979 through 1981 are discussed in the Goff affidavit, ¶ 17. Each of those departments was headquartered in San Francisco. Although the scope of the functions of the various SCC departments and the number of people involved in their performance have greatly increased in recent years, essentially the same functions were performed by BP Alaska during 1969 to 1977 and the Engineering Division of SPC during 1978 and early 1979. (Goff ¶ 17, Newton ¶ 25).

D. *Managing the Prudhoe Bay Field*

1. *The Prudhoe Bay Unit Agreement*

From the outset, it was expected that the main reservoir in the Prudhoe Bay field would be operated under a unit agreement among the owners of interests in the field. Under such an agreement, all of the production from the reservoir would be allocated among the lessees on a basis to be agreed upon. In 1969, the principal lessees entered into a letter of intent to allocate oil production on the basis of oil originally in place. (Adam ¶ 17).

The negotiation of the Prudhoe Bay unitization, which became effective April 1, 1977, began in 1969 and became intense over the two-year period from 1975 to 1977. Both BP Alaska and Sohio participated in the unitization negotiations, and BP Alaska provided substantial technical support from geologists, geophysicists, petrochemists, petroleum engineers, and accountants in San Francisco.

The effort also involved substantial amounts of management time. (Newton ¶¶ 28, 29).

The activities of the operators of the Prudhoe Bay field — Sohio and ARCO — are supervised by the Prudhoe Bay Unit Owners Committee and various Prudhoe Bay Unit subcommittees and task forces established by the subcommittees. Sohio personnel from San Francisco and elsewhere actively participate on the Prudhoe Bay Unit Owners Committee and in the activities of the Prudhoe Bay unit subcommittee structure and the various task forces. Most of the Sohio technical and support work related to the further development of the Prudhoe Bay Unit is performed in San Francisco. (Davies ¶ 6; Newton ¶ 27).

2. *Sohio Activities Related to the Management of the Prudhoe Bay Field*

The Sohio Production Group in San Francisco — primarily the Petroleum Engineering Department — has been responsible for the overall management and planning for the operation of Sohio's production interests in Alaska, including the Prudhoe Bay field. (Davies ¶ 6). The functions of the Petroleum Engineering Department during 1978-1981, discussed in the Davies affidavit, were carried out in the lower 48 states, primarily at Sohio's San Francisco offices. (Davies ¶ 7).

The functions of the Petroleum Engineering Department in San Francisco are substantially identical to the petroleum engineering functions performed by BP Alaska in San Francisco on behalf of Sohio during the period during 1974-1977. Prior to 1974, a small petroleum engineering staff performed similar functions at BP Alaska's New York headquarters. (Davies ¶ 4; Newton ¶ 25). During 1970-1977, the technical staff within the Petroleum Engineering Department of BP Alaska consisted largely

of petroleum engineers, geologists and engineering managers who were "seconded" from BP to BP Alaska. In addition, some specific research and development work for the Prudhoe Bay field was performed by the BP Research Group in England for BP Alaska. (Davies ¶ 5). Thus, the development activities ongoing in the Prudhoe Bay field depended heavily during that period on technical expertise drawn from BP.

The Engineering Division of Sohio's Technology and Planning Department in Cleveland provided engineering studies and consultation services in connection with the development and operation of the Prudhoe Bay field. The Research and Development and the Environmental Affairs Divisions of the same department also have been involved in a number of Prudhoe Bay projects. (Brown ¶¶ 8-9, 13-14, 16).

As discussed above, prior to 1978 the development of the Prudhoe Bay field was a responsibility of BP Alaska as contractor for Sohio. The activities of BP Alaska were monitored by Sohio's Oil and Gas Department, headquartered in Cleveland, Ohio, which approved expenditures by BP Alaska on behalf of Sohio. The decision of whether to participate in any part or all of a development program proposed by BP Alaska was made by Sohio in Cleveland. (Newton ¶¶10, 20).

E. *Transporting the Oil to the Lower 48*

1. *The Construction of TAPS*

The planning of the construction of TAPS began during the mid-1960s. (Elder ¶¶ 4-7). The Trans Alaska Pipeline System Agreement (the "TAPS Agreement"), dated August 27, 1970, between eight parties including subsidiaries of the Taxpayers, provided for the design, construction, and operation of a pipeline system consisting of a 48-inch diameter crude oil pipeline extending

from Prudhoe Bay to Valdez, Alaska, together with suitable pump stations, tankage, terminals, docks, communications networks, and other construction-related facilities, such as haul and access roads and a number of construction camps that were required for housing and feeding of workers during construction and startup. The capacity of TAPS, originally designed to be 600,000 barrels of oil per day, has been increased to approximately 1.6 million barrels per day. (Elder ¶¶ 8-9; Thomas ¶ 4).

The TAPS Agreement provided for the creation of a Construction Committee to administer the Agreement, and a number of subcommittees were established to analyze and review various areas of concern. Sohio was represented on the Construction Committee and had at least one representative on each of the subcommittees. Sohio's representatives to the Construction Committee and the subcommittees were headquartered in Cleveland, Ohio. In addition to the subcommittees, a working group with representatives from most of the other owner companies was involved in obtaining permits and approvals needed for the construction of TAPS. (Elder ¶¶ 11-13, 25). See the Donaldson affidavit, page 6, for a discussion of activities of Sohio's Government and Public Affairs Department in connection with the construction of TAPS.

The parties to the TAPS Agreement caused the incorporation of Alyeska Pipeline Service Company ("Alyeska"), the stock of which was owned by the parties to the TAPS Agreement in the same proportion as their ownership of undivided interests in TAPS. Alyeska was appointed the agent of the owner companies to undertake the engineering, design, and construction of TAPS. (Elder ¶¶ 14, 16).

The construction of TAPS began in February 1974 with the construction of an ice bridge over the Yukon River and a pioneer trail for the movements of materials from

the Yukon River to Prudhoe Bay. On April 29, 1974, construction began on the pipeline haul road from Livengood, Alaska to Prudhoe Bay. (Elder ¶ 24). Most materials and equipment purchased by Alyeska and major contractors in connection with the construction of TAPS were purchased outside Alaska. (Miller ¶ 9).

As discussed in the Elder affidavit, many Sohio personnel, including several executives, were deeply involved in the construction of TAPS, and a number were "loaned" to Alyeska. (Elder ¶¶ 17-30). In addition to individuals from Sohio who held or currently hold leadership positions with Alyeska, Sohio also assisted Alyeska in recruiting engineers, computer experts, technicians, inspectors, materials managers, contractor managers, pipeline specialists, and auditors to work on TAPS. (Elder ¶ 27).

The Engineering Division of Sohio's Technology and Planning Department in Cleveland, Ohio and BP personnel also played significant roles in the contruction of TAPS. (Brown ¶¶ 10-11). BP Alaska was also heavily involved. At the time of the BP-Standard Oil Agreement, the parties entered into an agreement with respect to TAPS pursuant to which BP Alaska agreed to act as the manager of Sohio's interest in the design and construction of TAPS. (Newton ¶ 13).

2. *Operation of TAPS*

Each TAPS owner utilizes its share of TAPS as an independent common carrier, separately publishing tariffs and receiving tenders of shipment through its portion of the capacity of the pipeline and paying its respective share of the operating and capital costs. The TAPS Coordination Division of the Sohio Transportation Department, in Cleveland, Ohio, is responsible for management oversight of, and oil movements through, Sohio's interest in TAPS. The scheduling of the oil movements

for Sohio's interest in TAPS is done entirely from Cleveland. (Thomas ¶¶ 7, 8).

The TAPS Coordination Division of the Sohio Transportation Department is responsible for involving the various elements of Sohio to carry out its functional responsibilities and to support the operation of TAPS. Some of the elements of the Sohio organization that have been involved in supporting TAPS include the Transportation Accounting Section, the Law and Government and Public Affairs Departments, Strategic Planning and Development, and the Engineering and the Research and Development Divisions of the Technology and Planning Department. (Thomas ¶ 9; Brown ¶¶ 8-11,13).

Alyeska acts as the agent for the TAPS owners in the operation of TAPS, but it takes direction from and reports to the TAPS Owners Committee, which is responsible for the general management oversight of TAPS. (Thomas ¶¶ 10, 17). Several subcommittees and task forces have been formed to oversee and report with respect to specific aspects of the TAPS operation. (Thomas ¶¶ 10-13). Each of Sohio's representatives on the TAPS Owners Committee and the subcommittees and task forces is headquartered in Cleveland. (Thomas ¶¶ 10, 12, 14).

All of the senior management of Alyeska continues to be loaned to that corporation by owners of TAPS, and Sohio has a number of executives and specialists on loan to Alyeska. (Thomas ¶¶ 8-9).

3. *Marine Transportation of Sohio ANS Crude Oil*

The marine transportation of Sohio's ANS crude oil is the responsibility of the Marine Transportation Division of Sohio's Transportation Department, headquartered in

Cleveland, Ohio. (Jacobson ¶¶ 4, 5).* Most Sohio Marine Transportation Division personnel are located in Cleveland, and a significant number are also located in Los Angeles and Long Beach, California. Of the 96 Sohio emloyees involved in Sohio's marine transportation activities, only five had their offices in Alaska. (Jacobson ¶¶ 6, 7).

Sohio's American Flag Operation, which is responsible for the transportation of ANS crude oil, involves approximately 50 vessels chartered to SPC Shipping Inc. This operation moves Sohio's ANS crude oil from Valdez to the West Coast of the United States, including Hawaii, and from Valdez to Panama for transshipment to smaller vessels and then movement through the Panama Canal to the Gulf Coast and East Coast of the United States, including Puerto Rico. (Jacobson ¶¶ 12-13). During 1981, the American Flag Operation conducted 562 discharge operations in 27 different ports in seven different states, plus Puerto Rico and the Republic of Panama. (Jacobson ¶ 29).

The fleet of United States flag tankers which Sohio has chartered to transport ANS crude oil amounts to approximately 3.7 million deadweight tons. (Jacobson ¶¶ 12-14). As discussed in the McGimpsey affidavit, Sohio was a party to contracts providing for the construction of six of the tankers under long-term charter. (Jacobson ¶ 18).

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*The specific responsibilities of the Marine Transportation Division are outlined in the Jacobson affidavit, ¶ 10. Marine Transportation also interacts with various other elements of Sohio, including Exploration and Production, Western and Eastern Crude Oil Supply, Product Supply, Materials Management, and the Engineering, Research and Development, and Environmental Affairs Divisions of the Technology and Planning Department. (Thomas ¶ 11; Brown ¶¶ 9, 13, 16).

The International Flag Operation of the Marine Transportation Division is responsible for transporting offshore crude oil which Sohio has acquired in exchange for ANS crude oil. (Jacobson ¶¶ 30-32).

As discussed in the Schreiner affidavit, the taxes paid by Sohio under the Oil Tax Act are influenced by the size of Sohio's "netbacks," essentially the sales price of Sohio's ANS crude oil minus the cost incurred in transporting the oil to market. (Schreiner ¶¶ 31-33). Sohio's efficiency in transporting ANS crude oil thus has a direct influence on the netbacks and the amount of taxes paid by Sohio under the Oil Tax Act. Sohio's transportation efficiency was increased in April 1979, when the floating terminals off Panama were replaced by an on-shore terminal located at Puerto Armuelles. (Jacobson ¶¶ 25-26). Under the Oil Tax Act, any cost savings attributable to such efficiency effected outside Alaska were translated into increased netbacks and higher taxes paid to the State of Alaska. (Schreiner ¶ 35).

4. *Proposed Pactex Pipeline*

Sohio's Pactex project, which involved the proposed construction of a marine terminal and pipeline to transport 500,000 barrels per day of ANS crude oil from Long Beach, California to Midland, Texas, is discussed in the Garibaldi affidavit. During the period 1974-1979, Sohio devoted substantial resources and spent approximately $57 million in an effort to make the Pactex project a reality. For reasons discussed in the Garibaldi affidavit, the project was frustrated and abandoned in 1979. If the Pactex project had been completed on a timely basis and for the amount contemplated, the cost of transporting ANS crude oil from the West Coast to the Gulf and East Coasts would have been substantially decreased, thereby increasing "netbacks" to Alaska. (Garibaldi ¶¶ 23-24).

5. *The Trans-Panama Pipeline*

In 1981, Sohio entered into an agreement with the Trans-Panama Pipeline System that provides for the construction of a pipeline which will permit the crude oil unloaded at Puerto Armuelles to be moved across Panama by pipeline rather than through the Panama Canal. The oil pipeline is scheduled to be operational in late 1982. It will be approximately 78 miles in length and, when it is fully operational, Sohio will be able to ship at least 130,000 barrels of ANS crude oil per day through the pipeline. (Jacobson, ¶¶ 27-28).

F. *Disposing of the Oil*

The methods by which Sohio disposed of its ANS crude oil are discussed above in Section III, where it was explained that Sohio's income from the production of ANS crude oil results from sales and exchanges of that oil in other states.

The disposition of Sohio's ANS crude oil is the responsibility of Crude Trading and Transportation Department personned in Cleveland, Ohio and Los Angeles, California. (Schreiner ¶¶ 3-4, 6, 8, 23). The Operations Planning Section of that department in Cleveland was primarily responsible for planning the overall crude oil business for Sohio, the most important element of which is the disposition of Sohio's ANS crude oil. (Schreiner ¶ 2).

As explained in the Schreiner affidavit, Sohio's "netbacks" on ANS crude oil and taxes paid under the Oil Tax Act are increased both by the ability of Sohio to dispose of a significant percentage of its ANS crude oil on the West Coast and by the aggressiveness of Sohio's crude oil marketing. As discussed above, the crude oil marketing activities that lead to such increases in the netbacks and of the taxes paid under the Oil Tax Act take

place almost entirely outside Alaska. (Schreiner, ¶¶ 30-31, 34-35).

G. *Providing the Centralized Management and Support Services for the Unitary Business*

The Sohio corporate organization is discussed in the Shanahan affidavit, ¶¶ 16-20. The affidavits filed on behalf of Sohio demonstrate that Sohio is primarily an integrated domestic petroleum company engaged in all phases of the petroleum business, including the exploration for and production of crude oil and natural gas and the transportation, refining and marketing of crude oil and petroleum products. (Shanahan ¶ 8). These facts demonstrate what the State has admitted for the purpose of its Motion for Summary Judgment — that Sohio is a unitary business. (R. for A. 19, 60-68. See also Answer to Sohio Complaint ¶ 2).

The State has also admitted for the purpose of its Motion for Summary Judgment that:

- Sohio incurs head office, research and development, and legal and accounting costs at its corporate and/or divisional headquarters which contribute to Alaska production. (R. for A. 109, 111, 113).
- Sohio's operations enjoy economies of scale resulting from centralized management and functional integration. (R. for A. 123, 125).

The State's admissions are borne out by the facts set forth in the affidavits filed herewith on behalf of Sohio. As discussed in the Shanahan affidavit, there were nine basic organizations within the Sohio corporate structure during the period 1978-1981: Government and Public Affairs, Technology and Planning, Finance and Administration, Law, Chemicals and Plastics, Marketing and Refining, Supply and Transportation, Natural Resources, and Em-

ployee Relations. (Shanahan ¶ 16). Several of the other affidavits submitted herewith discuss the functions of those organizations and explain that nearly all of the Sohio centralized administration and support functions take place outside Alaska, primarily at Sohio's Cleveland, Ohio headquarters.*

In addition to the Sohio headquarters organization in Cleveland, substantial management and administrative functions are conducted in San Francisco. (Murphy ¶ 7). While Sohio's San Francisco personnel now have responsibility for other areas, the primary function of Sohio's San Francisco offices during 1978-1981 was to provide direct management and administration of, and technical and administrative support to, Sohio's Alaska exploration and production activities. (Murphy ¶¶ 6-8).

There were three "operating" groups in the San Francisco organization: (1) the Exploration Group, discussed in the Lewis affidavit, ¶¶ 19-20; (2) the Production Group, which included the Petroleum and Engineering Department, discussed in the Davies affidavit; SCC, discussed in the Goff affidavit; the Continental United States Production Division, discussed in the Murphy affidavit, ¶ 17; and the Alaska Production Division (which during 1980 and 1981 was the functional equivalent of Sohio Alaska Petroleum Company), discussed in the Murphy

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*The functions of the nine basic Sohio organizations during 1978-1981 are described in the Sohio affidavits as follows: Government and Public Affairs — Donaldson; Technology and Planning — Brown and Shanahan ¶ 18(B); Finance and Administration — Haley ¶¶ 4-20, McGimpsey ¶¶ 4-8; Shanahan ¶ 18(C); Law — Shanahan ¶ 18(D), Murphy ¶ 9; Employee Relations — Shanahan ¶ 20(A), Murphy ¶¶ 10-13; Chemicals and Plastics — Shanahan ¶ 20(B); Natural Resources — Shanahan ¶ 20(C); Supply and Transportation — Shanahan ¶¶ 20(D), 15(G), Schreiner ¶¶ 13-8, Thomas ¶¶ 4, 8, 9, Jacobson ¶¶ 4-11, Miller ¶¶ 4-12 (Materials Management); Marketing and Refining — Shanahan ¶¶ 15(A) and (L), 20(E).

affidavit, ¶ 19; and (3) the Administration Group, discussed in the Murphy affidavit, ¶ 15.

V. *The Oil Tax Act Allocates to Alaska 100% of Sohio's Income from the Production and Sale of ANS Crude Oil and Taxes a Disproportionate Share of Sohio's Income*

A. *The Oil Tax Act Improperly Taxes Income Earned By Sohio In Other States*

It is clear that the Oil Tax Act taxes* 100% of the income Sohio derived from the production and sale of ANS crude oil and transportation of that oil in Alaska without regard to the facilities, sales, and personnel outside Alaska that contributed to the income stream. (Tanner ¶¶ 7, 10). This point has been conceded even by the State's affiants. (Conrad Depo. p. 89; Messenger Depo. p. 111). The facts summarized above demonstrate that Sohio's income from the production and sale of ANS crude oil is attributable to a host of activities in states other than Alaska.

This conclusion is borne out even by the State's own admissions and witnesses. The State has admitted, on information and belief, that Sohio conducts functions in other states that must be performed, either by Sohio or another party, either within or without Alaska, in order to produce oil in Alaska. (R. for A. 98, 104). The State has also admitted that Sohio's activities in other states contribute to Sohio's production of oil in Alaska. (R. for A. 95). Indeed, the State's affiant Horst has agreed that functional integration, centralization of management, and economies of scale "are almost, by definition, contributions to profit that arise only on account of having an

*Although the Oil Tax Act is no longer in effect, for ease of reference it is discussed herein in the present tense.

integrated business as a whole." (Horst Depo. pp. 441-442).

As it must be, the State is sensitive to this fundamental defect in the Oil Tax Act. The linchpin of the State's defense of the Oil Tax Act is the argument that the Act taxes income "actually earned" in Alaska (see, e.g., State's Memorandum at pp. 34-35, 43, and 78). This assertion, however, is not supported by the facts. As discussed above, there are critical activities that take place outside Alaska and that make substantial "contributions to profit" realized upon the ultimate disposition of oil produced in Alaska. Thus, because the Oil Tax Act taxes substantial income that is *not* "actually earned" in Alaska, the Act fails the very standard of constitutionality that the State itself has invoked.

To a large extent, the State's defense of the Oil Tax Act is a defense of the "separate accounting" scheme incorporated in the Act. The explanation of the defects in that scheme included in the affidavits of the Taxpayers' experts need not be repeated here.*

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*The comments of the State with respect to Sohio's use of separate accounting in state tax returns are inaccurate. Contrary to the statement in the State's Memorandum at p. 89 and in the Deakin affidavit, ¶¶ 16, 24, Sohio did not file a form of separate accounting return in 20 of the 27 states in which it did business. As Mr. Deakin has admitted, the State has confused separate company reporting with separate accounting. (Deakin Depo. p. 227). In fact, a majority of Sohio's state income tax returns are filed on an apportionment basis. (Tanner ¶ 13). The statement on p. 88 of the State's Memorandum that "British Petroleum Oil Co. [sic] and Sohio Pipeline Co. [sic] filed separate accounting returns in each of the tax years 1972-1975" is both mistaken and misleading. (Tanner ¶ 13. See also R. for A. 140, 141). The fact is that the State required Sohio to file on an apportionment basis prior to 1978 when it was to the State's advantage to do so. During that period Sohio was not earning any income from the production and sale of ANS crude oil and was spending huge sums to develop Prudhoe Bay and to construct TAPS.

The State has also tried to defend the Oil Tax Act on the basis of certain oil industry accounting practices. This attempted defense founders on the facts.

The State and its affiants assume that revenue from oil production should be recognized at the time of production and that sales values are fully earned at the wellhead. (State's Memorandum, p. 83; Deakin Aff. ¶¶ 41-56). However, the State has admitted that Sohio's income from the production of Alaska oil is not realized until a sale occurs. (R. for A. 89). Moreover, consistent with oil industry practices and generally accepted accounting principles, Sohio does not treat the sales value of ANS crude oil as being fully earned at the wellhead. Sohio does not recognize revenue or income from the sale of ANS crude oil until the oil is sold to, or exchanged with, a third party. (Haley ¶ 21).

The State also asserts that, in developing the "segment" or "line of business" information included in annual reports or used for internal purposes, the oil industry uses accounting methods or procedures similar to those employed in the Oil Tax Act. As shown in the Haley affidavit, ¶¶ 22-41, Sohio's accounting practices provide no theoretical or practical support for the measurement of income under "separate accounting" in the context of state taxation of unitary multistate business income. "Line of business" reporting, like the "separate accounting" methodology of the Oil Tax Act, reflects cost allocation procedures that give no consideration to, and are not designed to identify, the amount of income generated by activities other than physical production.* (Haley

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*To illustrate the point by an analogous example, while a barometer and a thermometer are each useful meteorological devices and each is effective at fulfilling the task for which it is designed, the one would prove very unsuitable for the task assigned to the other. In like fashion, while the procedures to which the State refers may be

¶¶ 30-32). There is a mass of evidence establishing that it takes far more than mere physical production to generate "production income."

Finally, as shown in the Haley affidavit, ¶¶ 42-44, the State has misinterpreted and mischaracterized Sohio's internal accounting records, referred to in the State's Memorandum at p. 21, n. 18 and p. 91, n. 55 and in the Supplemental Affidavit of Edward Deakin, ¶¶ 34-36.

B. *The Share of Sohio's Income Taxed By Alaska Is Grossly Disproportionate to Sohio's Corporate Presence In Alaska*

The State itself has recognized that one of the tests by which the constitutionality of state taxes is judged is whether they reach income "out of all appropriate proportion to the business transacted in the State." (State's Memorandum at pp. 61, 78). As the Taxpayers' Brief points out, it is not necessary to make such a showing when challenging the constitutionality of an unapportioned tax such as the Oil Tax Act. However, a result of Alaska's taxation of 100% of Sohio's income from the production and sale of ANS crude oil is that the Oil Tax Act would fail to pass muster under this standard if it were applicable.

The amount of taxes paid by Sohio under the Oil Tax Act was $53.2 million in 1978, $190.2 million in 1979, $337.6 million in 1980, and $477.9 million in 1981. (Tanner ¶ 22). The extent of the discrimination against Sohio is demonstrated by a comparison of the amount of income taxes paid by Sohio during 1978-1980 with the taxes Sohio would have paid in Alaska if it had been taxed exclusively under AS 43.20, as are more than 99% of all corporate

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suitable as accounting instruments for allocating costs, they were not designed as tools for measuring relative contributions to profit and thus cannot effectively be applied to that end.

taxpayers in Alaska. As discussed in the Tanner affidavit, ¶ 22, the amount of taxes paid by Sohio under the Oil Tax Act, expressed as a percentage of the taxes it would have paid under AS 43.20, was 538% in 1978, 453% in 1979, and 364% in 1980. As also discussed in the Tanner affidavit, ¶¶ 24-27, the amount of income taxes paid by Sohio to Alaska bears no reasonable relationship to the yardsticks by which corporate "presence" in a state is commonly measured.

The inequity of Alaska's taxation of Sohio is demonstrated by the State's own admissions. The percentages of Total Adjusted State Revenue, Total Adjusted State Non-Tax Revenue, Total State Tax Revenue, and Total State Income Tax Revenue paid by Sohio during Fiscal Years 1978-1981 are shown in the table below:

	Percentage Paid By Sohio			
	Total Adjusted State Revenue	Total Adjusted Non-Tax Revenue	Total State Tax Revenue	State Income Tax Revenue
FY 1978	16.78%	28.00%	11.19%	0%
FY 1979	27.04%	31.14%	23.78%	25.70%
FY 1980	40.72%	42.65%	39.30%	42.32%
FY 1981	42.77%	33.29%	46.90%	51.57%

Source: R. for A. 49

The percentages for the oil industry as a whole, of course, are much higher. Thus, it is not surprising that the State has admitted that the purpose of the Oil Tax Act was neither to compensate the State for the public services it provided the Taxpayers nor to defray the burden created by the Taxpayers' presence in the State. (R. for A. 5-8).*

*The State had a surplus of approximately $500 million at the end of Fiscal Year 1978, prior to receipt of any revenues under the Oil Tax Act. (Answer to Sohio Complaint ¶ 46). As taxes paid by Sohio

C. *The Alaska Tax Scheme Subjects Sohio to Double Taxation*

The alleged premise of the Oil Tax Act is that all the income taxed under the Act is "actually earned" in Alaska. Viewed as a whole, however, Alaska's tax scheme shows that this premise cannot be correct.

Under AS 43.20, if a corporation earns income from the sale of oil produced outside Alaska and engages in activities other than the production and transportation of oil and gas in Alaska, Alaska taxes a portion of the income from sales of oil produced outside Alaska by applying formula apportionment. What this means in Sohio's case is that Alaska not only *allocates* to itself 100% of Sohio's income from Alaska oil and gas operations under the Oil Tax Act, but Alaska also *apportions* to itself a fraction of Sohio's total income from oil and gas operations, including those conducted in Alaska. This places Alaska in the enviable position of both a production state that claims all local production income for itself and a non-production

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and other members of the oil industry under the Oil Tax Act skyrocketed, so did State revenues and expenditures per capita. (R. for A. 48, 58 (b) and (c)). None of those expenditures benefitted the persons who, according to the State, ultimately pay the taxes paid by Sohio under the Oil Tax Act — Sohio shareholders. (R. for A. 148). As discussed in the Legislative History Summary, as the oil industry began to pay higher and higher taxes, other taxpayers were granted tax relief. The individual income tax was repealed, and the State instituted a program of Permanent Fund "dividends". (Answer to Sohio Complaint ¶¶ 21, 47; R. for A. 43, 46). It is worth noting that the oil industry — the source of the revenue that made all this possible — has provided many services for itself that states normally provide to their citizens. For example, the owners of TAPS had to build their own haul road in connection with the construction of TAPS (Elder ¶ 24), and the Prudhoe Bay owners have provided their own Central Power Station, water supply and sewage disposal systems, telecommunications services, and transportation facilities. (Goff ¶¶ 7-8).

state that claims an apportioned share of total worldwide production income. (Tanner ¶¶ 18, 19).

Sohio is affected by this anomaly in Alaska's tax scheme because Sohio has a subsidiary which, while it does business in Alaska, does not produce or transport oil by pipeline there and must therefore file a separate return under AS 43.20. (Tanner ¶ 20). Thus, as applied to Sohio's affiliated group, the Oil Tax Act and the regular corporate income tax clearly overlapped and contradicted one another. Moreover, as explained in the Tanner affidavit, the impact on Sohio of Alaska's concurrent application of the Oil Tax Act and AS 43.20 was significant. (Tanner ¶ 21).

VI. *Sohio is Subjected to Substantial Multiple Taxation*

A. *Other States Where Sohio Does Business Can and Do Tax a Share of Sohio's Income from the Production and Sale of ANS Crude Oil*

The affidavits summarized above establish that Sohio operates a unitary integrated oil and gas business that crosses a number of state lines. Production and transportation activities conducted in Alaska by Sohio during 1978-1981 were supported by various resources, facilities, and personnel located outside Alaska, and most of Sohio's ANS crude oil was sold or otherwise disposed of in states other than Alaska. As discussed in the Taxpayers' Brief, all of the states in which activities related to the production and sale of ANS crude oil took place were entitled to tax income arising from the sale of that oil.* (Tanner ¶ 5. See also R. for A. 137).

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*Even the State has admitted that virtually all ANS crude oil is shipped out of Alaska and that all ANS crude oil shipped out of Alaska is "sold" in states other than Alaska under the definition of in-state sales set out in Article IV of the Multistate Tax Compact. (R. for A. 85).

The number of states in which Sohio does business is substantial. The Shanahan affidavit discusses the legal structure of Standard Oil and its subsidiaries during the period 1978-1981 and explains that Sohio operated as a unitary business conducting a wide variety of activities in well over half the states. (Shanahan ¶¶ 10, 15). Standard Oil's principal operating subsidiaries as of January 1, 1978 and January 1, 1980 (each of which was wholly-owned by Standard Oil and part of the Sohio unitary business) and the number of states in which they filed income tax returns are set forth in the table below:

PRINCIPAL STANDARD OIL OPERATING SUBSIDIARIES
AS OF JANUARY 1, 1978 AND 1980

Name of Subsidiary	Number of States in Which Returns Were Filed	
	1978	1980
Sohio Natural Resources Company	28	*
Sohio Petroleum Company	*	22
Sohio Alaska Petroleum Company(A)	*	2
Sohio Construction Company	*	4
Sohio Pipe Line Company	7	7
SPC Shipping Inc.	3	3
Sohio Supply Company	*	3
BP Oil Inc.	21	21
Vistron Corporation	24	24
Old Ben Coal Company	*	4

* Not a principal operating subsidiary as of this date.

(A) Previously named Sohio Natural Resources Company.

Sources: Shanahan ¶ 10; Tanner, Attachment V.

The operations of these and certain other Standard Oil subsidiaries during the period 1978-1981 are discussed in the Shanahan affidavit, ¶ 15. The numerous states in which Standard Oil and certain of its subsidiaries filed income tax returns for 1978, 1979 and 1980 are identified in Attachment V to the Tanner affidavit.

B. *The Oil Tax Act Subjects Sohio's Interstate Business to an Unconstitutional Multiple Tax Burden*

The methods Sohio used in calculating the multiple taxation caused by the Oil Tax Act, the magnitude of such multiple taxation, and the reasons why such multiple taxation is the fault of Alaska are discussed in the Affidavit of E. Wayne Tanner. Because of the Oil Tax Act, as the Tanner affidavit explains, Sohio has been subjected to significant multiple taxation and the risk of even greater multiple taxation than it has experienced to date.

There are a number of ways of quantifying the multiple taxation resulting from Alaska's scheme of taxing the oil industry. Most states that impose corporate income taxes use the federal corporate income tax base. For 1978, the aggregate amount of income on which Sohio was taxed by Alaska and other states came to 175% of Sohio's consolidated federal taxable income before deduction of net operating loss carryforwards and state income taxes. For 1979 and 1980, the percentages were 137 and 110, respectively. (Tanner ¶ 8). Accepting the suggestion of the State's affiant, Professor Deakin, that book income should be used to determine whether a company has been subjected to overlapping taxation, the Tanner affidavit explains that 124% of Sohio's pre-tax book income was taxed by Alaska and other states in 1978 and 1979. The corresponding figure for 1980 was 112%. (Tanner ¶ 9).

Regardless of what tax base is used for purposes of comparison, Sohio's income has clearly been subjected to multiple taxation. As discussed above, the Sohio income taxed under the Oil Tax Act ("Sohio's Alaska-taxed income") is also taxed in other states. Using the more conservative computation method, the level of multiple taxation of Sohio's Alaska-taxed income was 120% in 1978, 123% in 1979 and 111% in 1980. (Tanner ¶¶ 10, 11).

Although the actual level of multiple taxation is substantial, the risk of multiple taxation of Sohio's Alaska-taxed income is even greater. While the majority of tax returns filed by Sohio for the years 1978-1981 used a form of apportionment,* several states that have jurisdiction to tax Sohio's operation have chosen not to assert their full taxing jurisdiction. Moreover, in order to reduce the multiple taxation of its income under the Oil Tax Act, Sohio uses alternate filing methods, such as separate corporate reporting and separate accounting, when permitted to do so to lower its tax liability. (Tanner ¶ 13). As discussed in the Tanner affidavit, if other states made greater use of their jurisdiction to tax, the multiple taxation of Sohio's Alaska-taxed income (using the more conservative computation method) would have amounted to approximately 149% in 1978, 171% in 1979, and 168% in 1980. (Tanner ¶ 13).

For the reasons discussed in the Tanner affidavit, ¶¶ 16-17, the actual and potential multiple taxation to which Sohio is subjected is the product of the Alaska income tax system that the Taxpayers have placed at issue in this case. If all other states adopted the exclusive allocation and apportionment approaches embodied in the Oil Tax Act and Alaska's regular corporate income tax, AS 43.20, the multiple taxation of Sohio's income would be even greater than under the laws actually in force. Thus, the multiple taxation is inherent in Alaska's Oil Tax Act and regular corporate income tax. In short, the unconstitutionality of the Oil Tax Act is not attributable merely to inconsistencies between the Alaska tax scheme and those of other states. It is the fault of Alaska's specially tailored tax scheme.

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*The contrary suggestion in the State's Memorandum, pp. 88-89, is incorrect.

K. AFFIDAVIT OF SCOTT K. TOMPKINS

Scott K. Tompkins being duly sworn, deposed as follows:

1. My name is Scott K. Tompkins and I am a staff tax accountant in the Atlantic Richfield Company Tax Department, Exploration, Production & Pipeline Taxes. I have been employed by Atlantic Richfield Company for approximately eight years.

2. The facts reported herein are personally known to me. I am personally familiar with the way in which AS 43.21 and AS 43.20 in effect from January 1, 1978 through December 31, 1981 applied to Atlantic Richfield Company and its subsidiaries (hereafter Atlantic Richfield Company).

3. Atlantic Richfield Company paid taxes to the State of Alaska under AS 43.20 for taxable years 1973 through 1977 in the following amounts:

1973	1974	1975	1976	1977
$105,406	$186,745	$1,292,786	$2,027,974	$1,089,187

The State of Alaska has assessed additional taxes for this period which are currently under administrative appeal. Additionally, under the terms of a Closing Agreement dated April 23, 1976 between Atlantic Richfield Company and the State of Alaska, Atlantic Richfield Company paid $629,651 in taxes and interest for taxable years 1970 through 1972.

Comparative Alaska Tax Liability

4. The tax actually paid by Atlantic Richfield Company under the Oil Tax Act is shown below:

1978	1979	1980	1981
$41,657,074	$84,237,430	$130,866,021	$167,254,004

5. If the Oil Tax Act had not been enacted and Atlantic Richfield Company and its affiliates had been taxed under AS 43.20 just as all other corporate taxpayers in the state, we estimate that Atlantic Richfield's tax liability would have been as follows:

1978	1979	1980	1981
$5,658,076	$14,401,996	$18,133,383	Data Not Available

6. The Oil Tax Act was repealed by Free Conference Committee Substitute for Senate Bill 524 (FCCS S.B. 524) effective January 1, 1982 and was replaced with a special three factor apportionment formula income tax on the oil industry consisting of a sales factor, a property factor and an extraction factor. FCCS S.B. 524 provides that if the Oil Tax Act is held invalid by a final judgment of a court from which an appeal is not taken, then this special three factor apportionment income tax will be applied retroactively to tax years beginning after December 31, 1977. Should this provision take effect, Atlantic Richfield's estimated tax liability for taxable years 1978 through 1981 would be as follows:

1978	1979	1980	1981
$12,532,297	$32,807,396	$46,070,445	Data Not Available

7. The income of Atlantic Richfield Company subject to tax in Alaska under the Oil Tax Act is as follows:

1978	1979	1980	1981
$443,160,360	$896,142,870	$1,392,191,713	$1,520,945,120

In comparison, the *total* consolidated federal taxable income of Atlantic Richfield Company for each of those taxable years is:

1978	1979	1980	1981
$415,385,161	$1,383,103,021	$1,695,807,780	Data Not Available

8. Atlantic Richfield Company is subject to income tax in 44 states. The income subject to tax by the Oil Tax Act in Alaska was substantially more than the total income taxed by all of the other 43 states combined in the period 1978 through 1980.

The Alaska Income Tax Study

9. I was requested by Robert E. McManus, Associate Tax Counsel of Atlantic Richfield Company to undertake a study wherein the income tax provisons of Title 43 of the Alaska Statutes are applied to Atlantic Richfield Company's business activities in every state for tax years 1978, 1979 and 1980. The study assumes that every state in which ARCO does business employs Alaska's income tax statutes and regulations in the determination of taxable income.

10. In this study I was instructed to treat every state in which Atlantic Richfield Company was engaged in crude oil or gas production or pipeline transportation as a state in which AS 43.21, the Oil Tax Act, would apply. I was further instructed to follow the provisions of the Oil Tax Act as precisely as possible. During the entire period the Oil Tax Act was in effect there were no posted prices for Prudhoe Bay oil. Consequently, in determining the value of the oil at the point of production, the Oil Tax Act requires that the taxpayer take the sales price of the oil at the refinery where the oil is ultimately delivered and net back by deducting certain restricted transportation costs to arrive at "gross production revenue." Since all other fields in the lower 48 states have a posted price, the actual posted price in each field was assumed to be the value at

the point of production for purposes of applying AS 43.21 to all producing states. The study takes into account the retroactive amendments made to the Oil Tax Act in 1980 and 1981.

11. In this study I was also instructed to treat every state in which Atlantic Richfield Company was engaged in activities other than crude oil and gas production and pipeline transportation as a state in which AS 43.20, the Net Income Tax, would apply. Once again I was instructed to follow the provisions of AS 43.20 as closely as possible. Attached as Exhibit I is a Closing Agreement dated April 23, 1976 between Atlantic Richfield Company and the Alaska Department of Revenue wherein the Alaska Department of Revenue set forth the methodology which Atlantic Richfield Company must use for AS 43.20 tax returns. This methodology was applied in the study.

12. If the Alaska tax laws were applied to every state, in many states, as in Alaska, Atlantic Richfield Company would file both an AS 43.20 and an AS 43.21 tax return. AS 43.21 applied only to corporations engaged in oil and gas production and pipeline transportation in the state. An affiliated corporation not engaged in those activities would be subject to AS 43.20. Thus, in 1978, 1979 and 1980 in Alaska Atlantic Richfield Company has actually filed both an AS 43.21 return for its affiliated companies engaged in oil or gas production and pipeline transportation and an AS 43.20 return for its other affiliates such as ARCO Solar, Inc. and The Anaconda Company. The same methodology was followed in this study.

13. The results of this study are attached as Exhibit II. The study shows that more than 100% of Atlantic Richfield's U.S. Book Income is subject to tax when the Alaska law is applied to all states. Specifically, the study shows the following results:

Year	Income Subject To Tax By Applying Alaska Law To All States	Total U.S. Book Income Before Tax	Percent U.S. Book Income Taxed By All States Using Alaska Tax Methodology
1978	$1,181,529,858	$1,118,760,000	106%
1979	$2,330,454,831	$1,976,290,000	118%
1980	$3,117,200,802	$2,690,600,000	116%

14. The amount of duplicative taxation is even more pronounced when the results of this study are compared to Atlantic Richfield Company's federal taxable income as shown below:

Year	Income Subject To Tax By Applying Alaska Law To All States	Federal Taxable Income	Percent Federal Taxable Income Taxed By All States Using Alaska Tax Methodology
1978	$1,181,529,858	$ 415,385,161	284%
1979	$2,330,454,831	$1,383,103,021	168%
1980	$3,117,200,802	$1,695,807,780	184%

An Interactive Model Of The Alaska Income Tax

15. I was also requested to develop an interactive model of the Alaska income tax which would evaluate the impact of the Oil Tax Act on all potential oil and gas company taxpayers and would identify the situations under which duplicative taxation would exist. The model analyzes the taxable income which would result for taxpayers doing business in both producing states and non-producing states under a multitude of different facts and circumstances. The model relies on four variables as its input:

A. The ratio of exploration, production and pipeline income to book income.

B. The ratio of taxable income to book income.

C. The ratio of business done in producing and pipeline states to business done everywhere.

D. The ratio of non-producing and non-pipeline business done in producing states to total business done.

16. Based upon the data asserted by the State's affiant, Edward Deakin, in Exhibit IV to his affidavit (which is reproduced in my study), wherein Deakin shows that in 1980 the ratio of exploration and production income over total income for 15 major oil companies ranges from .454 to .943 (not including pipeline income), I analyzed the relationship of the other three variables over the entire range of possible ratios of exploration, production and pipeline income to total book income of from .5 to 1.0.

17. Through the use of a computer program, I ran more than 24,000 separate cases representing the broadest possible spectrum of circumstances. The resulting study is attached as Exhibit III to my affidavit. The conclusions I reached can be summarized as follows:

Ratio of Exploration Production and Pipeline Income To Total Book Income	Percentage Of Cases Resulting In Taxation Of More Than 100% Of Book Income	Number of Deakin's "15 Major Oil Companies Falling Closest to Each Ratio in 1980
.5	19%	1
.6	27%	1
.7	39%	2
.8	57%	5 (Including ARCO)
.9	76%	6 (Including Exxon and Sohio)
1.0	100%	0

18. The number of cases resulting in taxation of more than 100% of book income would be even greater if some improbable cases were eliminated. For example, a significant number of the cases in which less than 100% of book income is taxed are cases where the taxpayer is assumed to have little or no federal taxable income (and conse-

quently little or no income apportioned under AS 43.20). These cases understate the real world possibility of duplicative taxation. Atlantic Richfield Company's federal taxable income as adjusted under AS 43.20 and AS 43.21.040 Alaska law was 57%, 80% and 78% of total U.S. book income in 1978, 1979 and 1980 respectively. If we eliminate the cases in the study when the ratio of federal taxable income to book income is .5 or less, the percentage of cases resulting in duplicative taxation increases significantly as shown below:

Ratio of Exploration Production and Pipeline Income To Total Book Income	Percentage of Cases Resulting In Taxation Of More Than 100% of Book Income
.5	41%
.6	45%
.7	54%
.8	71%
.9	83%
1.0	100%

Further affiant sayeth not.

/s/ Scott K. Tompkins
Scott K. Tompkins

SUBSCRIBED AND SWORN TO before me this 26th day of July, 1982

/s/ Marion Hill
Notary Public In and For
Dallas County,
Dallas, Texas

My Commission Expires:
January 22, 1985

[Exhibits Omitted]

L. AFFIDAVIT OF OSCAR E. JONES

STATE OF TEXAS }
COUNTY OF HARRIS } ss.:

OSCAR E. JONES, being first duly sworn, deposes and says:

1. I am Supervisor of the Income and Franchise Tax Section of the Tax Compliance Division of Exxon Company, U.S.A. The Income and Franchise Tax Section ("the Tax Section") is responsible for the preparation and filing of federal and state income tax returns for Exxon Corporation and many of its affiliated corporations.

2. The Tax Section was asked by O'Melveny & Myers and Hartig, Rhodes, Norman, Mahoney, outside counsel for Exxon in this case, to estimate the share of Exxon's United States net income which would be subject to tax if all jurisdictions in the United States adopted Alaska's system for taxing the oil industry, as that system was in effect from 1978 to 1981. The work described below was done by me and persons in the Tax Section working under my direction in response to counsel's request.

3. The Alaska tax law involves three components that are relevant to this problem. First, Alaska directly allocates to itself 100% of net income (as defined by Alaska) from the production and pipeline transportation of oil produced in Alaska. Second, Alaska requires that a taxpayer apportion to Alaska a share of its worldwide income, on a federal taxable basis, from activities *other* than the production or pipeline transportation of oil. Third, if a taxpayer does not produce oil or transport it by pipeline in Alaska, Alaska requires that the taxpayer apportion to Alaska a share of its worldwide income from all sources

on a federal taxable basis. If all states used Alaska's system, Exxon would pay tax in states where it produces oil ("production states") on the basis of the first two components of the Alaska system; Exxon would pay tax in states where it does not produce oil ("non-production states") on the basis of the third component.

4. Alaska tax law and regulations prescribe exactly how the apportionments applicable to the second and third components of the tax system are to be made — both for taxpayers with production in Alaska and for those without such production. Exhibits A, B, and C to this Affidavit show what the relevant apportionment factors in each state would have been for Exxon in 1978, 1979 and 1980, respectively, if every state had enacted Alaska's law. The factors for production states are listed in column 9 of page 1 of each exhibit; the factors for non-production states are listed in column 10.

5. Exxon's United States exploration and production income for 1978, 1979, and 1980, as shown in the section of Exxon's 1979 and 1980 Annual Reports devoted to functional and geographic analysis of results, amounted to $1202 million, $1428 million, and $2131 million, respectively. These figures include income from pipeline transportation of crude oil. If all production states had used Alaska's tax law, the total of production and pipeline transportation income subject to tax in those states would have been equal to or greater than the figures for United States exploration and production income shown in Exxon's annual reports.

6. Exxon's worldwide income on a federal taxable basis in 1978, 1979, and 1980 was $4058 million, $4612 million, and $7079 million, respectively. The portion of that income attributable to exploration and production and pipeline transportation in each year was $3669 mil-

lion in 1978, $3541 million in 1979, and $5447 million in 1980.

7. To calculate the total income on which Exxon would have been subject to tax in 1978 if all states had adopted Alaska's tax law, I added three figures. The first figure, $1202 million, is Exxon's United States exploration and production income for 1978, and represents a minimum estimate of the income that would have been directly allocated to production states under Alaska's law. The second figure, $59 million, is the product of (1) the sum of the factors in column 9 of page 1 of Exhibit A and (2) Exxon's 1978 worldwide income, on a federal taxable basis, from activities other than exploration and production and pipeline transportation — i.e., the difference between $4058 million and $3669 million, or $389 million, times the sum of the factors. This figure represents the total income that would be apportioned to production states under Alaska's law. The third figure, $389 million, is the product of Exxon's 1978 worldwide income, on a federal taxable basis, and the sum of the factors in column (10) of page 1 of Exhibit A. This figure represents the total income that would be apportioned to non-production states under Alaska's law. The sum of the three figures, or $1650 million, reflects the total income that would be subject to state income tax if all jurisdictions had enacted Alaska's tax law.

8. Similar calculations for 1979, using the factors on Exhibit B, show that Exxon's total income subject to state income tax, if all jurisdictions had enacted Alaska's law, would be $2013 million. Similar calculations for 1980, using the factors on Exhibit C, show that Exxon's total income subject to state income tax, if all jurisdictions had enacted Alaska's law, would be $3094 million.

9. I obtained figures for Exxon's United States net income for 1978, 1979 and 1980 from page 31 of Exxon's

Annual Report for 1980. These figures are obtained by subtracting from the items shown for United States "earnings before federal income tax", the amount of federal income tax expense shown. In other words, Exxon's United States net income for 1978 was equal to $2406 million less $1063 million, or $1343 million; Exxon's United States net income for 1979 was equal to $2499 million less $1155 million, or $1344 million; and Exxon's United States net income for 1980 was equal to $3691 million less $1762 million or $1929 million.

10. A comparison of the figures in paragraphs 7 and 8 with those in paragraph 9 shows that the total income that would have been subject to state income tax if all jurisdictions had enacted Alaska's tax law, expressed as a percentage of Exxon's total United States income, is as follows:

1978... $1650 million ÷ $1343 million = 123%
1979... $2013 million ÷ $1344 million = 140%
1980... $3094 million ÷ $1929 million = 160%

Further affiant sayeth not.

/s/ Oscar E. Jones
Oscar E. Jones

Subscribed and sworn to before me this 28th day of July, 1982.

/s/ Esther M. Alvarado
Notary Public in and for
Harris County, Texas.

My commission expires 7/25/85.

[Exhibits Omitted]

M. AFFIDAVIT OF E. WAYNE TANNER

E. WAYNE TANNER, being first duly sworn, states as follows:

1. I am employed by The Standard Oil Company, an Ohio corporation ("Standard Oil"), as Manager, Tax Legislative Affairs in Standard Oil's Accounting Department. I have held that position since March 17, 1980, when I became employed by Standard Oil in the Tax Division of the Accounting Department. Prior thereto, I was employed by another major oil company and was involved in various phases of that corporation's tax department for 11 years.

2. I am personally familiar with the information referred to hereinbelow, which concerns the taxation of the income of Standard Oil and its subsidiaries (referred to herein collectively as "Sohio") by Alaska and other states. The data discussed below were prepared by personnel in the Tax Division of the Sohio Accounting Department under my supervision and direction.

3. I am personally familiar with the way in which the Alaska Oil and Gas Corporate Income Tax (the "Oil Tax Act"), AS 43.21, as in effect from January 1, 1978 through December 31, 1981, applied to Standard Oil subsidiaries engaged in oil and gas production and pipeline transportation within the State of Alaska. The practical effect of the Oil Tax Act was that Alaska taxed 100% of the income derived by Sohio from oil produced in Alaska and from the pipeline transportation of oil in Alaska.

4. I am personally familiar with the way in which the Alaska Corporate Income Tax (the "regular corporate income tax" or "Chapter 20"), AS 43.20, as in effect from January 1, 1978 through December 31, 1981, applied to Standard Oil subsidiaries engaged in other business activities within the State of Alaska. As is discussed below,

the regular corporate income tax assigns to Alaska an apportioned share of Sohio's oil and gas production and pipeline transportation income in the lower 48 states as well as an apportioned share of the income already subjected to tax by the Oil Tax Act.

STATE TAXATION OF SOHIO'S INCOME

5. As explained in more detail in affidavits of other Sohio personnel, Sohio operates a unitary integrated oil and gas business that crosses a number of state lines. Production and transportation activities conducted in Alaska by Sohio during 1978-81 were supported by various resources, facilities and personnel located outside Alaska, and most of the oil produced in Alaska during that period was sold or otherwise disposed of in states other than Alaska. All of the states in which Sohio's support and sales activities took place were entitled to tax income arising from the sale of oil produced in Alaska, and, as discussed below, a number of those states actually taxed such income. In other words, other states taxed a share of the same income that the Oil Tax Act allocated exclusively to Alaska. The states in which Standard Oil and certain of its subsidiaries filed income tax returns for 1978, 1979 and 1980 are identified on Attachment V.

6. As is more fully discussed in the affidavits of other Sohio personnel submitted herewith, Sohio's interest in the Trans Alaska Pipeline System is owned by Standard Oil's wholly owned subsidiary, Sohio Pipe Line Company. Sohio Pipe Line Company does business in and is taxed by various states outside Alaska. (See Attachment V.) Several of those states taxed an apportioned share of Sohio Pipe Line Company's income during 1978-1981; the income thus taxed outside Alaska included income derived from the pipeline transportation of oil in Alaska.

7. By taxing under the Oil Tax Act 100% of the income that Sohio derived from the disposition of the oil it produced in Alaska and from Sohio's transportation of oil by pipeline in Alaska ("Sohio's Alaska-taxed income"), notwithstanding that part of the same income was taxed by other states, Alaska has subjected Sohio to a significant multiple tax burden.

8. Most states that impose corporate income taxes use the federal corporate income tax return as a starting point for determining the amount of income to be taxed by the state. For 1978, the aggregate amount of income on which Sohio was taxed by Alaska and other states came to 175% of Sohio's consolidated federal taxable income before deduction of net operating loss carryforwards and state income taxes. For 1979 and 1980 the percentages were 137 and 110 respectively.

9. Despite the fact that most states use a corporate income tax base derived from the federal tax return, the supplemental affidavit of Professor Edward Deakin (one of the expert witnesses retained by the State of Alaska in this litigation) suggests that a company's book income should be used to determine whether the company has been subjected to overlapping taxation. Under this standard, Sohio was subjected to greater multiple taxation in 1980 than it was under the federal tax standard. The aggregate amount of income on which Sohio was taxed by Alaska and other states in 1980 came to 112% of Sohio's pre-tax book income for that year. The corresponding figure was 124% for both 1978 and 1979. The pertinent book income and federal taxable income data are summarized in the table below:

Year	Million of Dollars: Federal Taxable Income[1]	Book Income Before Taxes	Aggregate State Taxable Incomes[2]	% All States/ Federal	% All States/ Book
1978	$ 478.0	$ 672.2	$ 834.4	175%	124%
1979	$1,878.8	$2,077.0	$2,570.4	137%	124%
1980	$3,923.8	$3,846.0	$4,305.3	110%	112%

[1]Before deduction of net operating loss carryforwards and state income taxes.

[2]Before deduction of net operating loss carryforwards.

REGARDLESS OF THE APPROPRIATE TAX BASE, ALASKA'S TAXING SCHEME HAS SUBJECTED SOHIO TO MULTIPLE TAXATION

10. Regardless of what tax base is used for purposes of comparison, Sohio's income has clearly been subjected to multiple taxation. One means of computing the level of multiple taxation, as explained more fully below, is to determine the additional amount of income that other states tax as a result of Sohio's Alaska operations — *i.e.*, the amount by which the income that other states tax would decrease if Sohio had no operations in Alaska. Because Alaska taxes 100% of the income it assigns to Sohio's Alaska production and pipeline activities, the additional tax imposed on that income by other states necessarily represents multiple taxation. Attachments I, II, and III show the amount of Sohio's Alaska-taxed income that was taxed by Alaska under the Oil Tax Act and was also subjected to tax by other states. In 1978 the income subjected to such double taxation came to $115.9 million. It was $467.3 million in 1979 and $386.5 million in 1980. The computational methodology employed in the preparation of Attachments I, II and III is described in Attachment IV.

11. In percentage terms, the level of such multiple taxation of Sohio's Alaska-taxed income (using taxable income computed in accordance with the Oil Tax Act as a base) was 120% in 1978, 123% in 1979 and 111% in 1980. The following table sets forth the pertinent numbers:

PERCENTAGE OF MULTIPLE TAXATION
(Dollar Amounts in Millions of Dollars)

	Sohio's Alaska-taxed Income	Amount of Sohio's Alaska-taxed Income Taxed in States Outside Alaska	% of Sohio's Alaska-taxed Income Taxed in All States
1978	$ 565.6	$115.9	120%
1979	$2,023.3	$467.3	123%
1980	$3,591.6	$386.5	111%

The percentage of multiple taxation decreased in 1980 because of Sohio's reorganization, discussed in the affidavits of other Sohio personnel submitted herewith. Since most state income tax returns for 1981 will not be filed until the Fall of 1982, comparable data are not yet available for 1981.

12. The comparisons in the preceding paragraph may be understated to some degree because the portion of Sohio's Alaska-taxed income taxed in other states represents a comparison of federal taxable income apportioned to these other states — with Sohio's Alaska activity reflected therein — and federal taxable income that would be apportioned to those states in the absence of Sohio's Alaska activity. Because the multiple taxation amount is thus expressed in terms of federal taxable income, it reflects a number of deductions that the other states allow, in effect, but which are not taken into account in determining Sohio's Alaska-taxed income. Properly to compare like with like, Sohio's Alaska-taxed income and the amount thereof subjected to tax in other states should

be expressed in equivalent terms. This can be accomplished by converting Sohio's Alaska-taxed income to the same basis as the multiple taxation amount — *i.e.*, federal taxable income. The following table shows the percentage of multiple taxation when Sohio's Alaska-taxed income is expressed in terms of federal taxable income.

PERCENTAGE OF MULTIPLE TAXATION
(Dollar Amounts in Millions of Dollars)

	Sohio's Alaska-taxed Income[1]	Amount of Sohio's Alaska-taxed Income Taxed in States Outside Alaska	% of Sohio's Alaska-taxed Income Taxed in All States
1978	$ 413.3	$115.9	128%
1979	$2,034.3	$467.3	123%
1980	$3,476.3	$386.5	111%

[1]Computed in accordance with taxable income under the Internal Revenue Code, without regard to net operating loss carryforward and deduction of state income taxes.

SOHIO IS EXPOSED TO A RISK
OF EVEN MORE MULTIPLE TAXATION
THAN IT HAS EXPERIENCED TO DATE

13. The amounts and percentages discussed in the preceding paragraphs represent multiple taxation to which Sohio was actually subjected. Although the actual level of multiple taxation is substantial, the risk of multiple taxation of Sohio's Alaska-taxed income is even greater. While the majority of tax returns filed by Sohio for the years 1978 through 1981 used some form of apportionment, several states that have jurisdiction to tax Sohio's operations have chosen not to assert their full taxing jurisdiction. For example, Texas and Washington, both states in which Sohio does business, do not impose any corporate income tax. Various other states permit the taxpayer to choose from a variety of tax filings, including separate company reporting and separate accounting,

which may result in taxable income that is lower than it would be if those states exercised their taxing jurisdiction to the same extent that Alaska does in its regular corporate income tax. In order to reduce the multiple taxation of its income under the Oil Tax Act, Sohio uses such alternative filing methods when permitted to do so to lower its tax liability.* However, as shown below, the Oil Tax Act would subject Sohio to multiple taxation of approximately 149% in 1978, 171% in 1979 and 168% in 1980 if other states made greater use of their jurisdiction to tax. For purposes of the following table, it is assumed that each state in which Sohio does business has chosen to tax the Sohio group on a unitary basis, using formula apportionment as prescribed by AS 43.20.

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*The State's assertion at p. 88 of its Memorandum that BP Oil Corporation and Sohio Pipe Line Company filed separate accounting returns in Alaska for 1972-1975 is both mistaken and misleading. In fact, only Sohio Pipe Line Company filed on a separate accounting basis in each of those years. BP Oil Corporation filed separate accounting returns only for 1972 and 1973; its successor, Sohio Petroleum Company, filed apportionment returns in 1974 and 1975. Even with respect to the separate accounting returns that were filed, the State has overlooked to mention that those returns were rejected by the State on audit and unitary apportionment reporting has been required for those years and all subsequent years.

RISK OF MULTIPLE TAXATION
(Dollar Amounts in Millions of Dollars)

Year	1 Income subject to tax in other states absent Alaska operations	2 Income subject to tax in other states when Alaska operations are reflected	3 Additional income subject to tax in other states as a result of Alaska operations (Column 2 less Column 1)	4 Sohio's Alaska-taxed income	5 Total of Sohio's Alaska-taxed income and additional income subject to tax in other states as a result of Alaska operations (Column 4 plus Column 3)	6 % of Sohio's Alaska-taxed income taxable in all states (Column 5/Column 4)
1978	$ 64.7	$ 341.8	$ 277.1	$ 565.6	$ 842.7	149%
1979	$ (155.6)	$1,288.8	$1,444.4	$2,023.3	$3,467.7	171%
1980	$ 447.5	$2,880.1	$2,432.6	$3,591.6	$6,024.2	168%

14. If the potential multiple taxation is determined on the basis of Soho's federal taxable income or book income, the results are no less egregious. The aggregate income that Alaska taxed and that other states had jurisdiction to tax amounted to 190% of Sohio's federal taxable income (before deduction of net operating loss carryforwards and state income taxes) during 1978. The corresponding percentages were 176% in 1979 and 165% in 1980. The aggregate income that Alaska taxed and other states had jurisdiction to tax came to 135% of Sohio's pre-tax book income in 1978, 159% of pre-tax book income in 1979 and 168% of its pre-tax book income in 1980.

15. Again, the foregoing analysis of the risk of multiple taxation may be somewhat understated because federal taxable income numbers have been used outside Alaska while Sohio's Alaska-taxed income is determined under a standard reflecting, in general, smaller allowable deductions. The following table illustrates the risk of multiple taxation when Sohio's Alaska-taxed income is

computed consistently with federal taxable income, properly comparing like numbers with like.

RISK OF MULTIPLE TAXATION
(Dollar Amounts in Millions of Dollars)

Year	1 Income subject to tax in other states absent Alaska operations	2 Income subject to tax in other states when Alaska operations are reflected	3 Additional income subject to tax in other states as a result of Alaska operations (Column 2 less Column 1)	4 Sohio's Alaska-taxed income[1]	5 Total of Sohio's Alaska-taxed income and additional income subject to tax in other states as a result of Alaska operations (Column 4 plus Column 3)	6 % of Sohio's Alaska-taxed income taxable in all states (Column 5/Column 4)
1978	$ 64.7	$ 341.8	$ 277.1	$ 413.3	$ 690.4	167%
1979	$ (155.6)	$1,288.8	$1,444.4	$2,034.3	$3,478.7	171%
1980	$ 447.5	$2,880.1	$2,432.6	$3,476.3	$5,908.9	170%

[1]Computed in accordance with taxable income under the Internal Revenue Code.

THE EXISTENCE OF MULTIPLE TAXATION IS ALASKA'S FAULT

16. One of the authorities cited in the affidavit of Professor Deakin declares that a state's apportionment formula "should be held invalid on its face if its adoption in all states would result in double or multiple taxation." W. Beaman, *Paying Taxes to Other States*, at 3.20. The study described in the following paragraph shows that, if the income tax laws of every state in which Sohio paid taxes had been identical to the income tax laws of Alaska, Sohio would have been taxed on up to 165% of its pre-tax book income and up to 200% of its federal taxable income before deduction of net operating loss carryforwards and state income taxes.

17. To analyze what would happen if all states followed Alaska's example, it was assumed that each state in which Sohio is taxed applied AS 43.21 to corporations having income from oil and gas production and pipeline transportation in that state and applied AS 43.20 to all other corporations doing business in that state. When Sohio's taxes were calculated on that basis, with all of the states in which Sohio is taxed applying Alaska's tax scheme, the percentages of Sohio's federal taxable income (before deduction of net operating loss carryforwards and state income taxes) taxed by all states proved to be 200% in 1978, 182% in 1979 and 159% in 1980. The percentages of Sohio's book income (before taxes) taxed by all states came to 142% in 1978, 165% in 1979 and 162% in 1980. Thus if all other states adopted the exclusive allocation and apportionment approaches embodied in Alaska's Chapter 21 and Chapter 20, multiple taxation of Sohio's income would be even greater than under the laws actually in force. The pertinent data are set forth in the following table:*

	Millions of Dollars				
Year	Federal Taxable Income[1]	Book Income Before Taxes	Aggregate Taxable Incomes From Applying Chapter 21/20 to All States	% Aggregate To Federal Taxable Income	% Aggregate To Book Income Before Income Taxes
1978.....	$ 478.0	$ 672.2	$ 956.1	200%	142%
1979.....	$1,878.7	$2,077.0	$3,423.4	182%	165%
1980.....	$3,923.8	$3,846.0	$6,226.1	159%	162%

[1]Before deduction of net operating loss carryforwards and state income taxes.

*The numbers in this study reflect all of the retroactive amendments to Chapter 21 except those changing AS 43.21.040 and except for the impact of certain of the retroactive amendments with respect to Alaska-taxed income in 1979 and 1980; the data necessary to reflect these changes are not readily available, and the differences do not materially affect the results shown.

ALASKA FURTHER DISCRIMINATES AGAINST SOHIO BY TAXING OIL INCOME UNDER CHAPTER 20; THIS INCONSISTENCY RESULTS IN DOUBLE TAXATION BY ALASKA ITSELF

18. An underlying premise of the Oil Tax Act, as articulated in the Deakin affidavit (see paragraphs 40 and 80) and in the legislative history of the Oil Tax Act, is that formula apportionment inevitably results in under-attribution to the production state and over-attribution to the non-production state. Sohio contends that the premise is flawed; Alaska seems to agree, at times, for Alaska's tax scheme rejects that premise in Chapter 20. Under Chapter 20, if a corporation earns income from oil or gas production or transportation outside Alaska and engages in other activities in Alaska, Alaska taxes a portion of the income from such production or transportation outside Alaska by applying formula apportionment. What this means in Sohio's case is that Alaska not only *allocates* to itself 100% of Sohio's income from Alaskan oil and gas operations under Chapter 21, but — because Standard Oil has a corporate subsidiary taxed under Chapter 20 — Alaska also *apportions* to itself a fraction of Sohio's total income from oil and gas operations, including those conducted in Alaska.

19. In applying Chapter 20 to Standard Oil subsidiaries that do business in Alaska but do not engage in the production or pipeline transportation of oil there, the state apportions to itself a share of the income of the entire affiliated group of corporations, using the standard three-factor apportionment formula with the elements relating to Alaska oil and gas production and pipeline transportation appearing only in the factors' denominations. The effect is to place Alaska in the enviable position of both a production state that claims all local production income for itself under exclusive allocation and a non-

production state that claims a portion of the affiliated group's total production income under formula apportionment.

20. Alaska's claim to be able to have the Sohio cake and eat it too turns on the fact that SPC Shipping Inc. — a Standard Oil subsidiary that does business in Alaska but does not produce oil or transport oil by pipeline there — must file a separate return under Chapter 20. Alaska requires that this Chapter 20 return be prepared on a unitary basis, which means that the taxable income shown on the return before apportionment includes the income of the entire Sohio affiliated group. The Chapter 20 return for SPC Shipping thus includes in pre-apportionment taxable income both the income from Alaska oil and gas production and pipeline transportation — already taxed by exclusive allocation under Chapter 21 — and the income from non-Alaska oil and gas production and pipeline transportation. Part of the total income is then apportioned to Alaska for Chapter 20 tax purposes, notwithstanding that 100% of the Alaska production and pipeline income is already allocated to Alaska for Chapter 21 tax purposes.

21. The impact on Sohio of Alaska's concurrent application of Chapters 20 and 21 is significant. For 1978, 1979 and 1980, Sohio's taxable income under Chapter 20, before application of the net operating loss carryforward deduction, came to $901,000, $11,350,000 and $64,786,000, respectively — a total of over $77 million. If all oil and gas production and transportation income had been excluded from Sohio's apportionable income and all related property, payroll and sales had been excluded from the formula, the amounts apportioned to Alaska under Chapter 20 would have been losses of $133,000 and $3,507,000 in 1978 and 1979, respectively, and income of $14,307,000 in 1980. Although the impact on Sohio is masked because

of the net operating loss carryforward deduction, the effect of Chapter 20's inflation of Sohio's Alaska taxable income is to absorb, and thus deprive Sohio of, loss carryforwards that would otherwise be usable against taxable income generated in subsequent years. The Sohio oil and gas production and transportation income from Alaska and other states that was apportioned to Alaska under Chapter 20 in 1978-80 totalled $66,370,000. This represents income which was also taxed in its entirety under the Oil Tax Act or which, under the principles underlying the Oil Tax Act itself, was subject to the exclusive tax jurisdiction of other states. As applied to Sohio's affiliated group, the Oil Tax Act and the regular corporate income tax thus clearly overlapped and contradicted one another.

THE SHARE OF SOHIO'S INCOME THAT ALASKA TAXES IS GROSSLY DISPROPORTIONATE TO SOHIO'S CORPORATE PRESENCE IN ALASKA

22. The extent of the discrimination against taxpayers subject to the Oil Tax Act is demonstrated by the following table, which compares the income taxes paid by Sohio during 1978-1980 with the taxes Sohio would have paid if it had been taxed exclusively under AS 43.20, like most corporate taxpayers other than those engaged in the production and pipeline transportation of oil and gas in Alaska.

	Dollar Amounts in Millions			
	1978	1979	1980	1981
Chapter 21 Tax	$53.2	$190.2*	$337.6*	$477.9
Chapter 20 Tax	$ 9.9	$ 42.0	$ 92.8	Unavailable
Additional Tax	$43.3	$148.2	$244.8	Unavailable
% Chapter 21 Versus Chapter 20	538%	453%	364%	Unavailable

*These figures are subject to adjustment to reflect certain of the retroactive amendments to the Oil Tax Act. The magnitude of the adjustments is expected to be insubstantial.

23. There are two yardsticks by which corporate "presence" in a state is commonly measured: one such yardstick consists of the state's share of the corporation's total payroll, sales and property, which is the measure applied by Chapter 20 with respect to most corporate taxpayers, and the other consists of the state's share of the corporation's total capital expenditures.

24. Measured by either of these yardsticks, Sohio's Alaska tax burden is grossly disproportionate to Sohio's corporate presence in Alaska. In 1979, for example, 52% of Sohio's capital expenditures were made in Alaska, while 24% of Sohio's total payroll, sales and property were in Alaska; yet 86% of the total income taxes paid by Sohio to all states went to Alaska, and 79% of Sohio's aggregate state taxable income was claimed by Alaska. Moreover, of the total taxes of every kind that Sohio paid to all states, 90% went to Alaska in 1979.

25. The data for 1978, 1979 and 1980 are set forth in the following tables:

Tax Base and Tax Liability

	1978	1979	1980
Alaska Taxable Income as a Percentage of Aggregate State Taxable Income	68%	79%	83%
Alaska Income Tax Liability as a Percentage of Aggregate State Income Tax Liability	88%	86%	83%
All Alaska Taxes (income, property, severance, misc.) as a Percentage of the Aggregate of all State Taxes	87%	90%	90%

Measures of Corporate Presence Within a State

	1978	1979	1980
Payroll Factor: % In Alaska/All States	10%	9%	11%
Sales Factor: % In Alaska/All States	6%	14%	17%
Property Factor: % In Alaska/All States	51%	49%	50%
Capital Expenditures: % In Alaska/All States	57%	52%	45%

26. The data set forth in the foregoing paragraphs of this affidavit plainly demonstrate that the Oil Tax Act subjects Sohio to substantial multiple taxation of its Alaska-taxed income and to an even greater risk of multiple taxation of such income, that such multiple taxation is clearly the fault of the Oil Tax Act itself, and, finally, that the Oil Tax Act actually overlaps — and is contradicted by — the regular corporate income tax embodied in Alaska's Chapter 20. These consequences are the natural outgrowth of the fact, demonstrated in the immediately preceding paragraphs, that Alaska taxes Sohio on a portion of its aggregate income that is grossly disproportionate to the most commonly accepted indicia of Sohio's corporate "presence" in Alaska.

FURTHER AFFIANT SAYETH NAUGHT.

/s/ E. Wayne Tanner
E. Wayne Tanner

SWORN TO before me and subscribed in my presence this 27th day of July, 1982.

Notary Public

ATTACHMENT I

ACTUAL MULTIPLE TAXATION — 1978

	Sohio (Consolid.)	SNBC					Sohio Pipe Line Company					
	Calif.	Colorado	Illinois	Indiana	Louisiana	Virginia	Illinois	Indiana	Kentucky	New Jersey	Penn.	Taxable Income[3]
Tax Base	531.8	396.2	403.1	411.8	375.6	402.7	23.5	90.5	43.8	28.2	23.5	
Apportionment Factor	4.5%	.2%	12.8%	4.1%	6.8%	1.0%	3.6%	.3%	.1%	1.1%	.2%	
Apportioned Income[2]	23.8	.8	51.8	17.1	25.4	4.1	.8	.2	—	.3	.1	124.4
Tax Base	531.8	396.2	403.1	411.8	375.6	402.7	23.5	90.5	43.8	28.2	23.5	
Exclude: Sohio Income Taxed in Alaska[1]	413.3	393.4	393.4	393.4	393.4	393.4	43.4	43.4	43.4	43.4	43.4	
Recomputed Tax Base	118.5	2.8	9.7	18.4	—	9.3	—	47.1	.4	—	—	
Recomputed Apportionment Factor	1.9%	.3%	20.0%	12.9%	2.7%	—	24.6%	3.9%	1.4%	8.3%	1.6%	
Recomputed Apportioned Income[2]	2.3	.1	1.9	2.4	—	—	—	1.8	—	—	—	8.5
Difference												115.9

[1]Computed in accordance with Internal Revenue Code, before deduction of net operating loss carryforward and state income taxes.

[2]Computed before net operating loss carryforward deduction.

[3]Amount of Sohio income taxed in Alaska and reflected in taxable income in states other than Alaska.

ATTACHMENT II

ACTUAL MULTIPLE TAXATION — 1979

	Sohio (Consolid.)	SNRC					Sohio Pipe Line Company					
	Calif.	Colorado	Illinois	Indiana	Louisiana	Penn.	Illinois	Indiana	Kentucky	New Jersey	Penn.	Taxable Income[3]
Actual Tax Base	1,901.4	1,548.6	1,557.8	1,705.5	1,516.5	1,549.2	273.8	358.4	312.9	275.2	273.8	
Apportionment Factor	6.9%	.03%	14.0%	4.1%	1.0%	2.5%	2.9%	.3%	.2%	1.3%	.2%	
Apportioned Income[2]	131.2	.5	218.1	70.3	13.7	42.8	8.0	.9	.6	3.6	.6	490.3
Actual Tax Base	1,901.4	1,548.6	1,557.8	1,705.5	1,516.5	1,549.2	273.8	358.4	312.9	275.2	273.8	
Exclude: Sohio Income Taxed in Alaska[1]	2,034.3	1,532.8	1,532.8	1,532.8	1,532.8	1,532.8	313.9	313.9	313.9	313.9	313.9	
Recomputed Tax Base	-0-	15.8	35.8	172.7	—	16.4	—	44.5	—	—	—	
Recomputed Apportionment Factor	1.9%	.3%	20.5%	8.2%	.6%	11.4%	23.0%	3.9%	1.7%	8.3%	1.7%	
Recomputed Apportioned Income[2]	—	.1	5.1	14.2	—	1.9	—	1.7	—	—	—	23.0
Difference												467.3

[1] Computed in accordance with Internal Revenue Code, before deduction of net operating loss carryforward and state income taxes.

[2] Computed before net operating loss carryforward deduction.

[3] Amount of Sohio income taxed in Alaska and reflected in taxable income in states other than Alaska.

ATTACHMENT III

ACTUAL MULTIPLE TAXATION — 1980

	Sohio (Consolid.)	Sohio Pipe Line Company					
	Calif.	Illinois	Indiana	Kentucky	New Jersey	Pennsylvania	Taxable Income[3]
Actual Tax Base	3,961.7	440.7	530.4	474.6	450.2	442.5	
Apportionment Factor	9.6%	2.5%	.3%	.1%	1.3%	.2%	
Apportioned Income[2]	380.3	11.2	1.6	.5	5.8	.9	400.3
Actual Tax Base	3,961.7	440.7	530.4	474.6	450.2	442.5	
Exclude: Sohio Income Taxed in Alaska[1]	3,476.3	501.4	501.4	501.4	501.4	501.4	
Recomputed Tax Base	485.4	—	29.0	—	—	—	
Recomputed Apportionment Factor	2.6%	23.6%	4.0%	1.3%	9.5%	1.7%	
Recomputed Apportioned Income[2]	12.6	—	1.2	—	—	—	13.8
Difference							386.5

1. Computed in accordance with Internal Revenue Code, before deduction of net operating loss carryforward and state income taxes.
2. Computed before net operating loss carryforward deduction.
3. Amount of Sohio income taxed in Alaska and reflected in taxable income in states other than Alaska.

ATTACHMENT IV

The following paragraphs describe the computation methodology employed in Attachments I, II, and III.

A. In order to compute the extent to which Sohio's Alaska-taxed Income was subjected to multiple taxation during 1978-1980, it is necessary to determine the amount of income subject to taxation in states other than Alaska which results from the following: (1) the inclusion of income derived from the sale or other disposition of oil produced in Alaska in the income tax bases of such other states; (2) the inclusion of income derived from the pipeline transportation of oil in Alaska in the income tax bases of such other states; and (3) the inclusion in the apportionment factors used by such other states of Sohio property, payroll, and sales that contribute to the production of such income.

B. The first step in determining the amount of multiple taxation is to calculate the amount of Sohio income subjected to tax by other states that tax an apportioned share of either Sohio's consolidated income or the income of Standard Oil subsidiaries engaged in the production or pipeline transportation of oil in Alaska. The calculation of that income is shown on the first three lines of Attachments I, II, and III. The results of this calculation on a yearly basis are $124.4 million in 1978, $490.3 million in 1979, and $400.3 million in 1980.

C. The second step is to calculate the amount of income that would be taxed in such states if (1) Sohio's Alaska taxable income (computed in accordance with the Internal Revenue Code, since the states in question use federal taxable income with only minor variations) derived from the transportation and disposition of oil produced in Alaska were excluded from the tax base and (2) Sohio's Alaska property, Alaska payroll, and sales of

Alaska-produced oil as well as tariffs received for pipeline transportation of oil in Alaska were excluded from the apportionment factors applied in such other states. This calculation is shown on the bottom five lines of Attachments I, II, and III. The results on a yearly basis are $8.5 million in 1978, $23.0 million in 1979, and $13.8 million in 1980. When the latter figures are subtracted from the corresponding figures determined in the preceding paragraph, the difference is the amount of multiple taxation of Sohio's Alaska-taxed Income during 1978-80.

D. In the computations summarized on Attachments I, II and III, the tax laws of the other states that taxed the Standard Oil subsidiaries engaged in the production and transportation of oil in Alaska were applied as such laws apply in actual practice, except that, in those states that permit a deduction of net operating losses carried forward from previous tax years, this special deduction was disregarded in order to effect a meaningful comparison with taxable income under Alaska's Oil Tax Act, which does not permit any such deduction for net operating loss carryforwards.

E. The deduction of Sohio's Alaska-taxed Income computed in accordance with the Internal Revenue Code reflects a conservative approach that minimizes the amount of multiple taxation shown in the computation. That is so because the amount of Sohio's Alaska-taxed Income computed in that fashion will generally be less than the amount of income actually taxed by Alaska under the Oil Tax Act.

F. California taxed income derived from the sale or other disposition of oil produced in Alaska and the pipeline transportation of oil in Alaska on a consolidated apportionment basis during 1978-1980.

G. The Standard Oil subsidiary engaged in production of oil in Alaska during 1978 and 1979 was Sohio Natural Resources Company ("SNRC"). The income of SNRC, including income flowing from Alaskan production, was taxed on a separate company apportionment basis in Colorado, Illinois, Indiana, Louisiana and Virginia during 1978. The same was true in 1979, except that SNRC was not taxed in Virginia in that year. As a result of a corporate reorganization, more fully discussed in the affidavits of other Sohio personnel submitted herewith, the subsidiary engaged in the production of oil in Alaska during 1980 was Sohio Alaska Petroleum Company, which is neither qualified to do business in, nor taxed by, any state other than Alaska and California.

H. The Standard Oil subsidiary engaged in the pipeline transportation of oil in Alaska during 1978, 1979 and 1980 was Sohio Pipe Line Company. Sohio Pipe Line Company income, including income flowing from Alaskan operations, was taxed on a separate company apportionment basis in Illinois, Indiana, Kentucky, New Jersey and Pennsylvania during 1978-1980.

ATTACHMENT V

STATES IN WHICH STANDARD OIL AND CERTAIN SUBSIDIARIES WERE TAXED PURSUANT TO STATE INCOME TAXES OR TAXES MEASURED BY INCOME 1978-1980

Company	1978	1979	1980
The Standard Oil Company			
Ohio	X	X	X
BP Alaska Inc.			
Alaska	X	X	X
California	X	X	X
Sohio Natural Resources Company			
Alabama	X	X	
Alaska	X	X	
Arizona	X	X	
Arkansas	X	X	
California	X	X	
Colorado	X	X	
Florida	X	X	
Georgia	X	X	
Idaho	X	X	
Illinois	X	X	
Indiana	X	X	
Kansas	X	X	
Kentucky	X	X	
Louisiana	X	X	
Michigan	X	X	
Missouri	X	X	
Mississippi	X	X	
Montana	X	X	
Nebraska	X	X	
New Mexico	X	X	
North Dakota	X	X	
Ohio	X	X	
Oklahoma	X	X	
Pennsylvania	X	X	
Tennessee	X	X	

Company	1978	1979	1980
Utah	X	X	
Virginia	X	X	
Wisconsin	X	X	
Sohio Petroleum Company			
Alabama		X	X
Arizona		X	X
Arkansas		X	X
California		X	X
Colorado		X	X
Florida		X	X
Idaho		X	X
Illinois		X	X
Indiana		X	X
Kansas		X	X
Kentucky		X	X
Louisiana		X	X
Michigan		X	X
Mississippi		X	X
Montana		X	X
Nebraska		X	X
New Mexico		X	X
North Dakota		X	X
Ohio		X	X
Oklahoma		X	X
Tennessee		X	X
Utah		X	X
Sohio Alaska Petroleum Company			
Alaska			X
California			X
Sohio Construction Company			
Alaska		X	X
California		X	X
Ohio		X	X
Pennsylvania			X

Company	1978	1979	1980
Sohio Pipe Line Company			
Alaska	X	X	X
Illinois	X	X	X
Indiana	X	X	X
Kentucky	X	X	X
New Jersey	X	X	X
Oklahoma	X	X	X
Pennsylvania	X	X	X
SPC Shipping Company			
Alaska	X	X	X
California	X	X	X
Ohio	X	X	X
Sohio Western Crude Oil Company			
California	X	X	X
Sohio Supply Company			
Illinois			X
Louisiana			X
Ohio			X

Company	1978	1979	1980
BP Oil Inc.			
Connecticut	X	X	X
Delaware	X	X	X
District of Columbia	X	X	X
Florida	X	X	X
Illinois	X	X	X
Indiana	X	X	X
Kentucky	X	X	X
Maine	X	X	X
Maryland	X	X	X
Massachusetts	X	X	X
Michigan	X	X	X
New Hampshire	X	X	X
New Jersey	X	X	X
New York	X	X	X
North Carolina	X	X	X
Ohio	X	X	X
Pennsylvania	X	X	X
Rhode Island	X	X	X
Vermont	X	X	X
Virginia	X	X	X
West Virginia	X	X	X

Company	1978	1979	1980
Vistron Corporation			
Arkansas	X	X	X
California	X	X	X
Colorado	X	X	X
Connecticut	X	X	X
Florida	X	X	X
Georgia	X	X	X
Illinois	X	X	X
Indiana	X	X	X
Iowa	X	X	X
Kansas	X	X	X
Kentucky	X	X	X
Louisiana	X	X	X
Maryland	X	X	X
Massachusetts	X	X	X
Michigan	X	X	X
Mississippi	X	X	X
Missouri	X	X	X
Nebraska	X	X	X
New Jersey	X	X	X
New York	X	X	X
North Carolina	X	X	X
Ohio	X	X	X
Oklahoma	X	X	X
Tennessee	X	X	X
Old Ben Coal Company			
Illinois		X	X
Indiana		X	X
Kentucky		X	X
Pennsylvania		X	X

N. AFFIDAVIT OF R. F. HEIDNER

R. F. HEIDNER, being first duly sworn, deposes and says:

1. I am the Manager of the Tax Compliance Division of Exxon Company U.S.A., a division of Exxon Corporation ("Exxon"). As such I have responsibility for Exxon's compliance with the tax laws of the various jurisdictions in which it does business.

2. Attached as Exhibit A is a schedule setting forth the apportionment factors used by Exxon, in 1978, 1979, and 1980, in each state where Exxon filed a tax return and which required Exxon to include in the income base to be apportioned income from production of oil in Alaska. The factors listed on Exhibit A are those used on the returns as filed, except where there has been an assessed audit adjustment. In that event, Exhibit A shows the factor as adjusted after audit.

Further Affiant sayeth not.

/s/ R. F. Heidner, Jr.
R. F. Heidner, Jr.

Subscribed and sworn to before me this 28th day of July, 1982.

/s/ Martha L. Wright
Notary Public in and for
Harris County, Texas
My commission expires
3-2-85.

Exhibit A

Exxon Corporation
Apportionment Factors by State (Including D.C.) (1)
1978-1980

	Apportionment Factors for States Which Apportion Alaska Income		
	1978	1979	1980
Alabama	.591291	.701087	.583713
Alaska	—	—	—
Arizona	—	.191652	.154903
Arkansas	.309054	.325290	.273052
California	2.936400	3.137000	2.691900
Colorado	.064710	.164629	.350882
Connecticut	.499300	.674700	.790600
Delaware	.099870	.091737	.072665
District of Columbia	.093500	.096100	.096100
Florida	2.460000	2.361400	2.402683
Georgia	.570800	.450900	.435100
Hawaii	—	—	—
Idaho	.007989	.007906	.008095
Illinois	—	—	—
Indiana	.100000	.090000	.050000
Iowa	.031505	.037456	.029000
Kansas	—	—	.066900
Kentucky	.217182	.253697	.209100
Louisiana	—	—	—
Maine	.213100	.246000	.233500
Maryland	1.327800	1.137798	.983535
Massachusetts	.555700	.552100	1.095944
Michigan	—	—	—
Minnesota	.009300	.009000	.008100
Mississippi	—	—	—
Missouri	051100	.058000	.060000
Montana	.242330	.235000	.364750
Nebraska	—	.002967	.003431
New Hampshire	.059500	.050200	.027045
New Jersey	6.739400	6.890110	6.955300
New Mexico	—	.174364	.211718
New York	4.270363	4.318296	3.996137
North Carolina	1.233690	1.230871	1.087907
North Dakota	.019200	.064900	.045100
Ohio	.312200	.271689	.238384
Oklahoma	—	—	—
Oregon	.087176	.083531	.079006
Pennsylvania	1.745900	1.569500	1.492500
Rhode Island	.088800	.064600	.050441
South Carolina	.965740	.936780	.855815
Tennessee	1.155793	1.145216	1.079828
Utah	.077253	.062207	.066401
Vermont	.020900	.010200	.013300
Virginia	1.530453	1.432212	1.272621
West Virginia	.250453	.228739	.200563
Wisconsin	.105300	.065400	.045200
TOTAL	29.043052	29.423234	28.681219

(1) Per return as adjusted by formally assessed audit adjustments

O. AFFIDAVIT OF GARY L. JENKINS

STATE OF ALASKA
FIRST JUDICIAL DISTRICT } ss.

GARY L. JENKINS, being first duly sworn, deposes and says:

1. I am a resident of Juneau, Alaska.

2. From October 1972 until December 1974 I was Deputy Director of the Division of Audit in the Department of Revenue. Thereafter, until July 1981, I was Director of the Division of Audit.

3. The Division of Audit is charged with the responsibility of Administering the Net Income Tax (AS 43.20) and the Multistate Tax Compact (AS 43.19). I am familiar with how the Department of Revenue interpreted and administered AS 43.20 and AS 43.19 during my tenure with the Division of Audit.

4. The Oil and Gas Income Tax (AS 43.21) was enacted in 1978. Both before and after its enactment, throughout the period that I was employed with the Department of Revenue, AS 43.20 was construed consistently to require apportionment of the worldwide business income of a company which was part of a unitary business. For a taxpayer not subject to tax under AS 43.21, the business income subject to apportionment included income from production and pipeline transportation of oil and gas.

5. The business income subject to apportionment under AS 43.20 would include income from production and pipeline transportation outside Alaska and, for a taxpayer doing business on a unitary basis with an AS 43.21 taxpayer, it would include income from production and pipeline transportation within Alaska as well. In the latter case, the income from production and pipeline

transportation of oil and gas in Alaska would be taxed under AS 43.21.020 and .030 for the AS 43.21 taxpayer, and would be included in the apportionable income base for the AS 43.20 taxpayer.

6. I have reviewed Alaska Tax Ruling 82-2. The position taken in Ruling 82-2 is not consistent with the position of the Department of Revenue during my tenure with the Department.

/s/ Gary L. Jenkins
Gary L. Jenkins

SUBSCRIBED & SWORN TO before me this 15th day of November, 1982.

NOTARY PUBLIC for Alaska.
My Commission Expires:

P. FIRST SUPPLEMENTAL AFFIDAVIT OF ROBERT E. McMANUS

ROBERT E. McMANUS, being duly sworn, deposed as follows:

1. My name is Robert E. McManus and my title is Senior Tax Counsel, Tax Planning and Analysis Section, Exploration, Production and Pipeline Taxes, of the Tax Department of Atlantic Richfield Company.

2. The facts reported herein are personally known to me. I am personally familiar with the way in which AS 43.21 and AS 43.20, in effect from January 1, 1978 through December 31, 1981, were applied by the Alaska Department of Revenue. I am also personally familiar with the different ways in which the Department has interpreted AS 43.20 since issuing Ruling 82-2 in October 1982.

3. In 1978, 1979, 1980 and 1981 Atlantic Richfield Company (ARCO) filed both an AS 43.21 return for its affiliated companies engaged in oil and gas production and pipeline transportation in Alaska and an AS 43.20 return filed on behalf of its other affiliates such as ARCO Solar, Inc. and the Anaconda Company which are engaged in business in Alaska. With regard to Atlantic Richfield Company's AS 43.20 returns for those years, the Alaska Department of Revenue required that Atlantic Richfield Company include in its income subject to apportionment, the worldwide income of its consolidated group, including worldwide oil and gas production and pipeline transportation income. A detailed summary of the Department's treatment of AS 43.20 taxpayers prior to the issuance of Ruling 82-2 is presented in my original affidavit.

4. Attached to my affidavit are five exhibits which document the various positions taken by the Department after this case was heard in the court below with regard to

the manner in which AS 43.20 should be interpreted under Ruling 82-2.

5. Exhibit I is a letter to ARCO from the Department dated December 3, 1982 wherein the Department requested that ARCO provide data which would enable the Department to recalculate ARCO's 1978 income tax liability under AS 43.20 as modified by Ruling 82-2.

6. Exhibit II is a copy of a letter dated January 19, 1983 from ARCO to the Department requesting clarification of the Department's interpretation of the meaning of Ruling 82-2. Specifically, ARCO requested the Department's position regarding the treatment of exploration activities under Ruling 82-2.

7. Exhibit III is a copy of the Department's response to ARCO's January 19, 1983 letter, wherein the Department advised that under Ruling 82-2 only the income and factors of production and pipeline activities were to be excluded from the AS 43.20 tax calculation and not the income or factors attributable to exploration activities.

8. Exhibit IV is a letter from ARCO to the Department dated August 19, 1983 wherein ARCO provided the Department with a recalculation of ARCO's 1978 AS 43.20 tax liability in accordance with the instructions provided to ARCO by the Department.

9. Exhibit V is a copy of a letter dated April 27, 1984 from the Department to ARCO wherein the Department advised ARCO that it had once again changed its position regarding the manner in which ARCO should file its 1978 AS 43.20 tax return. The Department's latest position is that under Ruling 82-2 worldwide exploration activities should not be included in the Chapter 20 apportionable income and apportionment factors.

10. The effect of this latest interpretation of Ruling 82-2 is that if Alaska's laws were applied in every state, in

those states where a taxpayer is engaged in business including exploration activities but is not engaged in production or pipeline activities, the taxpayer would be subject to AS 43.20 but would have to exclude from apportionable income all of its exploration losses. Only in those states where a taxpayer had production or pipeline transportation and was subject to the Oil Tax Act would it be able to take into account exploration losses.

11. In its brief the State inexplicably disputes ARCO's claim that ARCO's Alaska income under the Oil Tax Act has increased as a result of reversing the flow of the Line 90 pipeline which now carries crude oil from the West Coast to the Gulf Coast and the State asserts that "that pipeline does not even carry Alaska crude." State's Brief p. 71. The State never raised or contested this issue in the court below. The State appears to have misread the affidavits supplied by ARCO, possibly because Line 90 is also known as the Four Corners Pipeline. In fact millions of barrels of Alaska crude oil have been transported through Line 90 during the years at issue in this litigation. So that there is no question regarding this fact, attached as Exhibit VI is a copy of the Four Corners Pipeline Company Statement of Account for August, 1978, the first month in which Alaska crude oil flowed through the newly-reversed Line 90.

Further affiant sayeth not.

/s/ Robert E. McManus

Robert E. McManus

SUBSCRIBED AND SWORN TO before me this 10th day of July, 1984.

/s/ Marion Hill
Notary Public for the
State of Texas

My commission expires:
1-22-85

EXHIBIT I

December 3, 1982 (205) 622-7588

Mr. Stephen Fraley
Atlantic Richfield Company
515 South Flower Street
Los Angeles, CA 90051

Dear Mr. Fraley:

I find I need the following information from you in order to complete our audit of ARCO's 1977 and 1978 Alaska income tax returns:

1. Everywhere property, payroll, and sales factors related to oil and gas production and pipeline transportation at 1-1-78 and 12-31-78.

2. Worldwide net income, before income taxes, derived from oil and gas production and pipeline transportation for the year 1978.

This data will permit me to calculate ARCO's 1978 income tax liability in accordance with the Department's Revenue Ruling 82-2, a copy of which is enclosed.

Please furnish this information not later than December 20. Let me know if you have any questions regarding this request.

Very truly yours,

/s/ Monte Renfro

Monte Renfro
Revenue Field Auditor

EXHIBIT II

AtlanticRichfieldCompany Finance
515 South Flo Street
Mailing Address: Box 2679 - T. A.
Los Angeles, California 90051
Telephone 213 486 2714
R. G. Memsic
Manager — Federal and State
Income Tax Audits
Tax Department

January 19, 1983

State of Alaska
Department of Revenue
United Airlines Building, Suite 770
2033 Sixth Avenue
Seattle, Washington 98121

Attention: Ms. Monte Renfro
Revenue Field Auditor
Reference: Atlantic Richfield Company and Subsidiaries
Alaska Corporation Net Income Tax
Audit of 1977 and 1978 Returns

Dear Ms. Renfro:

In response to your letter of January 3, 1983, our compliance staff has begun to gather the data requested in your letter of December 3, 1982, but some questions have arisen as to precisely what data is needed. Specifically, under Alaska Revenue Ruling 82-2, the term "income" is not defined. Does the Department of Revenue intend that AS 43.20 taxpayers exclude the worldwide federal taxable income attributable to oil and gas production and pipeline transportation, as suggested in your letter, or the book income of these operations calculated under AS 43.21's separate accounting methodology?

Secondly, with regard to the exclusion of production and pipeline factors from the apportionment formula under Alaska Revenue Ruling 82-2, what is the intention of the Department of Revenue with regard to factors attributable to worldwide exploration activities?

Please advise as to the Department of Revenue's interpretation of Alaska Revenue Ruling 82-2 with regard to these two issues in order that we can gather the proper data.

Sincerely,

/s/ R. G. Memsic

R. G. Memsic

EXHIBIT III

STATE OF ALASKA
DEPARTMENT OF REVENUE
SEATTLE REGIONAL OFFICE

February 1, 1983

R. G. Memsic
Manager — Federal and State
Income Tax Audits
Tax Department
Box 2679 - T.A.
Los Angeles, CA 90051

Dear Mr. Memsic:

I have the following answers to the questions you raised in your letter dated January 19, 1983:

1. The Department of Revenue intends that AS 43.20 taxpayers shall exclude from apportionable income the worldwide book income, as calculated under AS 43.21's separate accounting methodology, attributable to oil and gas production and pipeline transportation.

2. Regarding the apportionment factors, factor data from *all* activities except oil and gas production and pipeline transportation should be included in the apportionment factors.

Please let me know if you have any further questions.

Very truly yours,

/s/ Monte Renfro

Monte Renfro
Revenue Field Auditor II

EXHIBIT IV

ARCO Oil and Gas Company
Post Office Box 819
Dallas, Texas 75221
Telephone 214 651 4988

Robert E. McManus
Staff Tax Counsel

CERTIFIED MAIL
August 19, 1983

Ms. Monte Renfro
Revenue Field Auditor II
Department of Revenue
State of Alaska
United Airlines Building, Suite 770
2033 Sixth Avenue
Seattle, Washington 98121

Re: 1980 Income Tax Audit;
Tax Ruling 82-2

Dear Ms. Renfro:

Pursuant to your written request of December 3, 1982 (copy attached), enclosed are the workpapers which we have prepared which recompute Atlantic Richfield Company's AS 43.20 tax liability for tax year 1978 in accordance with the new interpretation of AS 43.20 which the Department adopted in Tax Ruling 82-2 issued on October 4, 1982. This recalculation has been made in accordance with the Department's interpretations and instructions provided in your letter of February 1, 1982. (Copy also attached.)

Tax Ruling 82-2 is a subject of controversy in the case of *Atlantic Richfield Company, et al. v. State of Alaska*, et al., No. 3AN-79-1903 Civ. which is presently on appeal to the Alaska Supreme Court. Atlantic Richfield Company

believes that Tax Ruling 82-2 is an ineffective attempt by the Department to administratively repair constitutional defects in the Alaska Tax Statutes. By submitting these workpapers pursuant to your request and instructions we do not waive any of our contentions in this litigation.

We appreciate your cooperation in allowing Atlantic Richfield ample time to prepare these workpapers. Tax Ruling 82-2 requires us to break out data between ARCO's integrated exploration function and production function in a manner which is not normally kept in our books and records. Consequently, it required a great deal of time to reconstruct the data. Please advise us if you have any questions regarding these workpapers.

Sincerely,

/s/ Robert E. McManus

Robert E. McManus

EXHIBIT V

STATE OF ALASKA
DEPARTMENT OF REVENUE
SEATTLE REGIONAL OFFICE

April 27, 1984

Mr. Robert E. McManus
Staff Tax Counsel
ARCO Oil and Gas Company
P.O. Box 2819
Dallas, TX 75221

Dear Mr. McManus:

Last August we received from you a recalculation of ARCO's Alaska taxable income for 1978 under Chapter 20. This calculation had been made pursuant to Alaska Revenue Ruling 82-2 and in accordance with instructions received from me concerning the inclusion of worldwide exploration activities in the computation of apportionable income and of the apportionment factors. I have delayed responding to the receipt of this recalculation before now because the Audit Division has been in the process of re-evaluating its conclusion that worldwide exploration activities should be reflected in the apportionable income and the apportionment factors.

It has finally been determined that, contrary to our earlier instructions to ARCO, worldwide exploration activities should *not* be included in the Chapter 20 apportionable income and apportionment factors because these activities are an integral part of oil and gas production activities. Therefore, I must ask you to send me the appropriate amounts representing Alaska and worldwide exploration activities that should be deducted from the

previously submitted apportionable income and the apportionment factor numerators and denominators. This will enable us to arrive at the correct determination of ARCO's taxable income under Chapter 20 for 1978.

I apologize for any inconvenience this change may have caused you. Please let me know if you have any questions.

Yours truly,

/s/ Monte Renfro

Monte Renfro
Supervisor

EXHIBIT VI

TEXAS-NEW MEXICO P L CO
P.O. BOX 52332
HOUSTON, TEXAS 77252

STATEMENT OF ACCOUNT

August, 1978

Grade 0275 Alaska

Atlantic Richfield Co. 00574
Domestic Recording
Unit E/MOCO
Room 2010 Ht
3580 Willshire Blvd.
Los Angeles, California 90010

Tariff No. 00-0000-00-00

	Barrels
First of Month Balance	0.00
RECO Four Corners Pipe Line Co. at Shell-Bisti	206,271.38
	206,271.38
End of Month Balance	206,271.38
Shipper Balance	206,271.38

Q. LIST REQUIRED BY RULE 28.1.

ARCO PIPE LINE COMPANY

Atlantic Richfield Company

ATLANTIC RICHFIELD COMPANY

ABE Beverage, Inc.
Agro Internacional, S. de R.L. de C.V.
Almeg Extrusion Company, Inc.
Alyeska Pipeline Service Company
Ambler Mining Company
Anaconda Exploration New Zealand Limited
Anamax Mining Company
Anamet, S.A. de C.V.
ARCO Chemical IBERICA, S.A.
ARCO Oil Limited
ARCO Solar Nigeria, Ltd.
Arpet Petroleum Limited
A/S Skaland Graftiverk
Atlantic Richfield Oil Limited
Atlantic Richfield de Mexico, S.A. de C.V.
Badger Pipeline Company
Black Lake Pipe Line Company
Blair Athol Coal Pty., Limited
Candel International, Limited
Caribou-Chaleur Bay Mines Ltd.
Caribou-Smith Mines Ltd.
Centroamerica de Cobre, S.A.
Cobre de Hercules, S.A.
Cobre de Mexico, S.A.
Cobrecel, S.A. de C.V.
Colonial Pipeline Company
Compania Minera Dos Republicas S.A. de C.V.
Compania Minera Kappa, S.A.
Compania Minera Penacobre, S.A.
Compania de Petroleo Ganso Azul, Ltda.
Cook Inlet Pipe Line Company
Cupro San Luis, S.A. de C.V.
Delaware Bay Transportation Company
Dexter de Mexico, S.A.
Dixie Pipeline Company
East Texas Salt Water Disposal Co.
85819 Canada Limited

Eisenhower Mining Company
Empresa de Comercio Exterior Mexicano, S.A. de C.V.
Ericsson
Flower Street Limited
Gravity Adjustment, Inc.
Greater Pacific Limited
Imperial Eastman de Mexico, S.A.
Impulsora De Cobre, S.A. de C.V.
Industrias Nacobre, S.A. de C.V.
Industrias Tecnos, S.A. de C.V.
Iricon Agency Ltd.
Kenai Pipe Line Company
Kronos, Computacion y Teleproceso, S.A. de C.V.
Kuparuk Transportation Capital Corporation
Kuparuk Transportation Company
Las Quintas Serenas Water Company
Lavan Petroleum Co.
Lingobronce, S.A.
Manufacurera Mexicana De Partes Para
Automoviles, S.A. de C.V.
Mayflower Mining Company
Minera Anaconda Limitada
Montoro, Empresa Para La Industria Quimica
Nacional de Cobre, S.A.
Nihon Oxirane Company, Ltd.
Nordisk Mineselskab A/S
Oxirane Technology (Japan) Company
P.T. Arutmin Indonesia
P.T. Elnusa Chemlink
Park City Ventures
Park-Cummings Mining Company
Park-Premier Mining Company
Participaciones Mexicanas, S.A. de C.V.
Platte Pipe Line Company
Prince Consolidated Mining Company
Productos Especiales Metalicos, S.A.
Richfield U.K. Petroleum, Limited
Rodman, Inc.
Servicios Industriales Nacobre, S.A.
Sinclair (U.K.) Oil Company Limited
Sinclair Venezuelan Oil Company
Smoke House Copper Mining Company

Sociedade Anonima Marvin
Solvanmex, S.A. de C.V.
SUMIARCO Company Limited
Swecomex, S.A.
Tecumseh Pipe Line Company
Texas-New Mexico Pipe Line Company
Tubos Flexibles, S.A.
Union de Credito Industrial Vallejo, S.A.
West Mayflower Mining Company
William Prym de Mexico, S.A.

BP ALASKA, INC.

The Standard Oil Company
The British Petroleum Company p.l.c.
BP International Limited

EXXON CORPORATION

A.B.C.-Azienda Briantea Carburanti S.r.l.
Abu Dhabi Company for Onshore Oil Operations
Abu Dhabi Petroleum Company Limited
Ace Polymer Co., Ltd.
Aditivos Orinoco, C. A.
Administravia Industrias Reliance S.A. de C.V.
Adria-Wien Pipeline Gesellschaft mit beschrankter Haftung
AFCO AB
Aircraft Fuel Supply B. V.
Aishin Sekiyu K. K.
Aktiebolaget Svensk Petroleumadministration
Alberta Products Pipe Line Ltd.
Al-Jubail Petrochemical Company
Altona Petrochemical Company Limited
Alyeska Pipeline Service Company
Andian National Corporation, Limited
Arabian American Oil Company
Aramco Overseas Company
Aramco Services Company
A/S Futurum
A/S Hydrantanlaegget Kobenhavns Lufthavn, Kastrup
Asakawa Sekiyu K.K.
Asociacion Civil "Academy La Castellana"
Association Petroliere, Belge
Atlas Supply Company
Atlas Supply Company of Canada Limited

Australian Synthetic Rubber Company Limited
Aviation Services Saudi Arabia Limited
Awaji Gas Nenryo Kabushiki Kaisha
Azienda Carburanti Lubrificanti Affini, S. p. A. — Milano (ACLAM)
Azuma Sekiyu K.K.
BEB Gewerkschaften Brigitta und Elwerath Betriebsfuhrungsgesellschaft m.b.H.
Bangkok Aviation Fuel Services Limited
Banshu Ekika Gas K. K.
Bayerische Erdgasleitung G.m.b.H.
Beaverhill Resources Limited
Bel-Air Entreposage S. A.
Building Products of Canada Limited
Byron Creek Collieries (1983) Limited
Canada Wide Mines Ltd.
Carnduff Gas Limited
Castle Peak Power Company Limited
Champlain Oil Products Limited
Changi Airport Fuel Hydrant Installation Pte. Ltd.
Chuo Sekiyu Hanbai K.K.
Cia Refinadora Petrolera Santo Domingo, Inc.
Colmant Cuvelier Dodge S.A.
Commercial Polymers Pty. Ltd.
Compagnie d'Etancheite Africaine en Cote d'Ivoire S. A.
Compania Minera Disputada de Las Condes S.A.
Comptoir Auxiliaire du Petrole
Computer Centrum Groningen B.V.
DFTG Deutsche Flussigerdgas Terminal GmbH
D.O.C. Dutch Offshore Consortium B.V.
Dai Nippon Jushi Kabushiki Kaisha
Daihatsu Sekiyu K.K.
Daiichi Kouyu K.K.
Daitsu Sangyo K.K.
Depot Petrolier du Gresivaudan
Depots de Petrole Cotiers
Depots Petrolier de la Corse
Det Gronlandske Olieaktieselskab
Deudan-Holding GmbH
Deutsche Erdgas Transport G.m.b.H.
Deutsche Transalpine Oelleitung G.m.b.H.
Devon Estates Limited

Dixie Pipeline Company
Dodge de Mexico S.A. de C.V.
Drivmedelscentralen Aktiebolag
Dukhan Service Company
E S F Limited
Eagle Kenso K.K.
East Japan Oil Development Company, Limited
East Texas Salt Water Disposal Company
Eiko Sekiyu K.K.
Ejendomsaktieselskabet af 12. juni 1964
Elwerath Erdol und Erdgas AG
Emirates Oilfield Chemicals Company
Emori Sekiyu K.K.
Emsland-Erdolleitung G.m.b.H.
Engycalor-Energia Calore S.r.l.
Entrepot Petrolier de l'Aveyron (E.P.A.)
Erdgas-Verkaufs-Gesellschaft m.b.H.
Escuela Las Morochas, C. A.
Esso Chemical Alberta Limited
Esso Chimie
Esso Energie G.I.E.
Esso Exploration and Production Angola Inc.
Esso Italiana S.p.A.
Esso Malaysia Berhad
Esso of Canada Limited
Esso Resources Canada Limited
Esso Reunion
Esso Societe Anonyme Francaise
Esso Standard Tunisie S. A.
Exact Reisebyra A/S
Exxon Chemical Pakistan Limited
Exxon S.r.l.
F. T. Giken Kabushiki Kaisha
FALCA S.p. A.
Federal Pacific Electric de Mexico S.A. de C.V.
Federal Pioneer Limited
Ferngas Nordbayern G.m.b.H.
Ferngas Salzgitter GmbH
Forenade Svenska Oljeimportorers AB
Forjas de Colombia, S. A.
415572 Ontario Inc. (operating as Kentom Steel)
Fuji Kogyo K.K.

Gasunie Engineering B.V.
General Bussan K.K.
General Highway K.K.
General Petrochemical Industries Limited
General Sekiyu K.K.
General Sekiyu Okinawa Hanbai K.K.
General Sekiyu Overseas Ltd.
General Shipping Co. Ltd.
General Unyu Kabushiki Kaisha
Geobutane-Lavera
Gewerkschaft Brigitta
Gewerkschaft Elwerath
Gewerkschaft Elwerath & Co. GmbH.
Gewerkschaft Erdol-Raffinerie Deurag-Nerag
Gilbarco do Brasil S. A.-Equipamentos
Goroku Sekiyu K.K.
Grande Ecaille Land Company, Inc.
Groupement Immobilier Petrolier
Groupement Petrolier Aviation
Groupement Petrolier du Finistere G.I.E.
Groupement pour l'Etude d'un Pipeline Bordeaux Toulouse
Hankyu Ferry K.K.
Hannoversche Erdolleitung G.m.b.H.
Hanshin Kyowa Sekiyu K.K.
Hayakawa Sekiyu K.K.
Heinrich Schneider Spedition GmbH
Hiroshima General Gas Juten Kabushiki Kaisha
Hoei Sekiyu K.K.
Hokuyu Sekiyu K. K.
Houston Regional Monitoring Corporation
Hydranten-Betriebsgesellschaft
Hydrierwerke Poelitz Aktiengesellschaft
I.C.I.O.M.-S. p. A.-Importazione Carboni Industria Olii Minerali
Imperial Oil Limited
Imperial Pipe Line Company, Limited, The
Inada Ekka Gas Kabushiki Kaisha
Industrias Reliance S.A. de C.V.
Industry Promotion Enterprises Limited
InteCom, Inc.
Interface Mechanisms Inc.
Interprovincial Pipe Line (Alberta) Ltd.

Interprovincial Pipe Line Limited
Interprovincial Pipe Line (NW) Ltd.
Iranian Oil Particípants Limited
Iranian Oil Services (Holdings) Limited
Iranian Oil Services Limited
Iraq Petroleum Company, Limited
Iraq Petroleum Pensions, Limited
Ivrea Petroli Affini Gas (I.P.A. Gas) S. r. l.
Japan Butyl Company Limited
Japan Coal Liquefaction Development Company, Ltd.
Jersey Nuclear-Avco Isotopes, Inc.
K.K. Aizu General
K.K. Daimaru
K.K. General Sekiyu Hanbaisho
K.K. Genetech
K.K. Heian Sekiyu
K.K. Kanagawa Sekiyu Shokai
K.K. Kyoei Shosha
K.K. Kyowa Sekiyu Service
K.K. Marugo Izumasa Shoten
K.K. Nippatsu
K.K. Standard Sekiyu Osaka Hatsubaisho
K.K. Toko
K.K. Toresen
K.K. Uwano Sekiyu Shokai
K/S ejendomsselskabet af 8.oktober 1965
K/S Hoje Taastrup Storcenter II
K/S Statfjord Transport A/S & Co.
Kabushiki Kaisha Sankyo Plastics
Kai Tak Refuellers Company Limited
Kanto Kygnus Sekiyu Hambai K.K.
Karlsruhe-Stuttgart Rohrleitung Gesellschaft mbH
Kawasaki Kygnus Sekiyu Hambai Kabushiki Kaisha
Keihin Kygnus Kabushiki Kaisha
Keiyo Sekiyu Hanbai K.K.
Kenarin Agencies Ltd.
Kenya Petroleum Refineries Limited
Kepco Mfg. Inc.
Kibo Sekiyu Hanbai K.K.
Kinwa Sekiyu K.K.
Kobe Port Service Kabushiki Kaisha
Kobe Standard Sekiyu K. K.

Kowa Sekiyu K.K.
Kowloon Electricity Supply Company Limited
Kygnus Ekka Gas Kabushiki Kaisha
Kygnus Kosan Kabushiki Kaisha
Kygnus Marketing Service K.K.
Kygnus Sekiyu K. K.
Kyushu Eagle K.K.
LPL Investments, Inc.
La Compagnie Electrique Pioneer du Quebec, Inc.
Lakehead Pipe Line Company, Inc.
Laykold Corporation
LEAG Aktiengesellschaft fur luzernisches Erdol
Les Docks des Petroles d'Ambes
Les Restaurants Le Voyageur Inc.
Limburgsche Maatschappij voor Gasdistributie Limagas N.V.
Long Beach Oil Development Company
Maasvlakte Olie Terminal N.V.
Maasvlakte Coal Terminal B.V.
Maatschappij voor Intercommunale Gasdistributie Intergas N.V.
Maatschappij voor Intercommunale Gasvoorziening in Oost-Brabant "OBRAGAS N.V."
Magota Sekiyu K.K.
Mainline Pipelines Limited
Makoto Sekiyu Kabushiki Kaisha
Maple Leaf Petroleum Limited
Maquinas de Coser y Bordar Sigma, S. A.
Mars-Alcatel, S.A.
Marugo Gas K.K.
Mediterranea Bitumi, S. p. A.
MEGAL FINCO
MEGAL GmbH
Meiji Sekiyu K.K.
MESBIC Financial Corporation of Houston
Mikawa Bussan K.K.
Mittelrheinische Erdgas Transport Gesellschaft mit beschrankter Haftung
Montreal Pipe Line Limited/Les Pipe-Lines Montreal Limitee
NAM-K 7 B.V.
NAM-K 14 B.V.
NAM-K 15 B.V.
NAM-CLOMS-K 8-K 11 B.V.

NAM/CLOMS - L 13 B.V.
N. V. Nederlandse Gasunie
NPC Services, Inc.
Nakabayashi Sekiyu K.K.
Nansei Oil Terminal K.K.
Nansei Sekiyu Kabushiki Kaisha
Native Venture Capital Co. Ltd.
Near East Development Corporation
Nederlandse Aardolie Maatschappij B. V.
Neptune Bulk Terminals (Canada) Ltd.
Niagara Structural Steel (St. Catharines) Limited
Nichimo Kabushiki Kaisha
Nichimo Oil (Bermuda) Co., Ltd.
Nichimo Sekiyu Seisei Kabushiki Kaisha
Nikko Sangyo K.K.
Nippon Unicar K.K.
Nisku Products Pipe Line Company Limited
Nissei Sekiyu Kabushiki Kaisha
Norddeutsche Erdgas-Aufbereitungs G.m.b.H.
Norddeutsche Mineraloelwerke Stettin G.m.b.H.
Norddeutsche Oelleitungs-gesellschaft m.b.H.
Nordrheinische Erdgas Transport Gesellschaft mit beschrankter Haftung
Nord-West Oelleitung G.m.b.H.
Norforge Inc.
Norsteel Limited
Northern Steel Co. Ltd.
Northward Developments Ltd.
Northwest Company, Limited
Nottingham Gas Limited
Office Prive d'Assurances et de Courtages
Offshore Medical Support Limited
Oil Field Chemicals Company (Saudi Arabia) Ltd.
Oil Service Company of Iran (Private Company)
Oil Spill Response Limited
Oil Transport Company (Saudi Arabia) Limited
Oldenburgische Erdol Gesellschaft m.b.H.
Omnisport Australia International Pty. Ltd.
Omnisport B.V.
Omnisport International Inc.
Omnisport International (U.K.) Limited
Omnisport International (U.S.) Inc.

Omniturf Surfaces (N.A.) N.V.
107580 Canada Inc.
139675 Canada Limited
140129 Canada Limited
Osaka Propane Gas Hambai Kabushiki Kaisha
Osaka Sekiyu Gas Yuso K. K.
P. T. Stanvac Indonesia
Pars Investment Corporation
Peninsula Electric Power Company Limited
Petroleum Refineries (Australia) Proprietary Limited
Petroleum Services (Middle East) Limited
Petroleum Tankship Company, Inc.
Petrosvibri S.A.
Photonic Automation, Inc.
Pinpoint Retail Systems Inc.
Pipeline Service
Pipeline Service Iran
Pipeline Service U.K.
Pipe Line Services, Inc.
Plantation Pipe Line Company
Polder-Seehafen-Harburg GmbH
Portland Pipe Line Corporation
Potencia Industrial S.A.
Productos Lorain de Mexico S.A. de C.V.
Progas A/S
Raffinerie du Midi S.A.R.L.
Rainbow Pipe Line Company, Ltd.
Redwater Water Disposal Company Limited
Refineria Petrolera Acajutla, S. A.
Reliance Electric & Engineering Company de Mexico S.A. de C.V.
Reliance Electric Limited (Japan)
Reliance Electric S.A. (Spain)
Renix Co. Ltd.
Renown Building Materials Limited
Rheingas Erdgasleitungs-Gesellschaft m.b.H.
Rotterdam Antwerpen Pijpleiding (Belgie)
Rotterdam-Antwerpen Pijpleiding (Nederland) N. V.
Ruhrgas Aktiengesellschaft
S.A. du Pipeline a Produits Petroliers sur Territoire Genevois (SAPPRO)
S.C.O.C. — Societa Commercio Olii Combustibili S. p. A.

SEAG Aktiengesellschaft fur schweizerisches Erdol
SERAM Societa per Azioni
S.O.P. — Societa Oleodotti Padani S. p. A.
Saitama Sekiyu Hanbai K.K.
Sakurajima Futo K.K.
Sanko Oil Kabushiki Kaisha
Sanwa Kasei Kogyo Kabushiki Kaisha
Sanyo Sekiyu K.K.
Saraco S. A.
Saudi Arabian Lube Additives Company Limited
Schubert KG
Seibu Kygnus Sekiyu Hambai Kabushiki Kaisha
Seismic Industries A/S
Senpoku Oil Service K.K.
Servacar Ltd.
Shehtah Drilling Limited
Shimoka Sekiyu Kabushiki Kaisha
Shimoyama Sekiyu K.K.
Shin-Nihon Yukagaku Kogyo K. K.
Shinohara Oil K.K.
Shizuoka Kanesho Hambai Kabushiki Kaisha
Smiley Gas Conservation Limited
Sociedad Anonima "Escuela Campo Alegre"
Sociedad de Inversiones de Aviacion
Sociedad Nacional de Oleoductos Ltda.
Societa Italiana per l'Oleodotto Transalpino S.p.A.
Societa per Azioni Raffineria Padana Olii Minerali-SARPOM
Societe Anonyme de la Raffinerie des Antilles
Societe Anonyme des Hydrocarbures
Societe Anonyme "Produits Lubrifiants de Madagascar" — PROLUMA S.A.
Societe Belge de Transport par Pipeline
Societe Civile de Mustapha Algerie
Societe Civile de Participation pour la Destruction des Dechets Industriels (SOCDI)
Societe Civile Immobiliere "Courcelles-Etoile"
Societe Civile Immobiliere de la Croix au Chene
Societe Civile Immobiliere du 195 Avenue de Neuilly
Societe Civile Immobiliere Khariessa
Societe Civile Immobiliere "Kleber-Etoile"
Societe Civile Immobiliere "Les Casseaux-Bougainville"
Societe de la Raffinerie d'Alger

Societe de la Raffinerie de Lorraine
Societe de Manutention de Carburants Aviation
Societe de Manutention de Carburants Aviation Dakar-Yoff, S.A.
Societe de Promotion et de Financement Touristique (CARTHAGO)
Societe d'Entreposage de San-Pedro
Societe des Pipe-Lines de Strasbourg
Societe des Transports Petroliers par Pipe Line
Societe d'Exploitation & de Developpement d'Operations Commerciales
Societe du Caoutchouc Butyl (SOCABU)
Societe du Depot Petrolier d'Hauconcourt
Societe du Pipe Line de la Raffinerie de Lorraine
Societe du Pipe-Line Mediterranee-Rhone
Societe du Pipeline Sud-Europeen
Societe Esso de Recherches et d'Exploitation Petrolieres Esso Rep
Societe "Geomines-Caen"
Societe Havraise de Manutention de Produits Petroliers
Societe Hoteliere de la Petite Campagne
Societe Immobiliere Paris-Niel
Societe Ivoirienne d'Operations Petrolieres S.A.
Societe Malgache de Raffinage
Societe Reunionnaise d'Entreposage
Socony-Standard-Vacuum Oil Company (Petroleum Maatschappij)
Southern Natural Gas Development Pty. Ltd.
Standard Kosan Kabushiki Kaisha
Standard Oil S.r.l.
Standard Service K.K.
Statfjord Transport A/S
Stockage Geologique de Gaz de Lavera
Suddeutsche Erdgas Transport Gesellschaft mit beschrankter Haftung
Suntech Company, Ltd.
Supertex, Inc.
Svensk Petroleumlagring Tre Aktiebolag
Sydis, Inc.
Synerude Canada Ltd.
Synergistics Chemicals Limited
305120 Alberta Ltd.

346877 Ontario Limited
TAR-Tankanlage Rumlang AG
TBN Tanklager-Betriebsgesellschaft Nurnberg mbH
THUMS Long Beach Company
Taglu Enterprises Ltd.
Taihei Bussan K.K.
Taiko Sekiyu K.K.
Taisei Kogyo Sekiyu Hanbai K.K.
Taketsuru Yugyo K.K.
Tanaka Sekiyu Hanbai K.K.
Tankanlage A. G., Mellingen
Tanklager Altishausen A. G.
Tanklager Gesellschaft, Koln
Tanklager-Gesellschaft Tegel
Tanklager Lechelles I S.A.
Tanklager Taegerschen AG
TecSyn International Inc.
Tecumseh Gas Storage Limited
Thyssengas G.m.b.H.
TIBA Speditions GmbH
Toa Nenryo Kogyo Kabushiki Kaisha
Tohko Plastics Company, Limited
Tokai General Sekiyu Hanbai K.K.
Toko Sekiyu K.K.
Toledo Scale Company de Mexico S.A. de C.V.
Toledo Werk GmbH
Tonen Energy International Corp.
Tonen Maintenance K.K.
Tonen Sekiyukagaku Kabushiki Kaisha
Tonen Tanker Kabushiki Kaisha
Tonen Technology K.K.
Toscana Lavorazione Petroli S. p. A.
Towa Sekiyu K.K.
Toyoshina Film Company, Ltd.
Trans-Arabian Pipe Line Company
Transalpine Finance Holdings S.A.
Transalpine Oelleitung in Oesterreich Gesellschaft m.b.H.
Transgaz Lavera
Tsurumaru Unyu K.K.
Turkish Petroleum Company, Limited
UBAG — Unterflurbetankungsanlage Flughafen Zurich
Union des Raffineurs Belges "U.R.B."

Van Salt Water Disposal Company
W.A.G. Pipeline Pty. Ltd.
W. H. Adam, Ltee, Ltd.
Wako Jushi Kabushiki Kaisha
Wako Kasei Kabushiki Kaisha
Wartempomp Nederland B.V.
Westdeutsche Erdolleitungs-G.m.b.H.
Westgas G.m.b.H.
Westgastransport B.V.
Williamsport Properties Limited
Winnipeg Pipe Line Company Limited
Wohnungsbaugesellschaft, Steimbke-Rodewald G.m.b.H.
Worex
Worex et Cie
Wrenford Insurance Company Ltd.
Yasaka Sekiyu K.K.
Yellowstone Pipe Line Company
Yoshimi Gas Kabushiki Kaisha
Yuai Sekiyu K.K.
Yugen Kaisha Nishi Kobe Bosai Center

EXXON PIPELINE COMPANY

Exxon Corporation

SOHIO ALASKA PETROLEUM COMPANY

The Standard Oil Company
The British Petroleum Company p.l.c.
BP International Limited

SOHIO PIPE LINE COMPANY

The Standard Oil Company
The British Petroleum Company p.l.c.
BP International Limited